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Envisioning Community Sustainability: Views from a Rural Alberta Community

by

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Abstract

Rural community sustainability in Canada has been an issue for at least three decades with sustainability/sustainable development becoming part of the policy lexicon in the last two. While various definitions may incorporate combinations of environmental, economic, social, political and cultural dimensions, consensus is lacking regarding the meaning of 'community sustainability' as the concept has become increasingly co-opted by economic expansionist hegemony.

The purpose of this study was to establish how members of a rural Alberta community conceptualize sustainability in their own community. The method photo elicitation interviews through participant generated photographs allowed for a more focused and grounded discussion of community sustainability. Collectively, respondents conceptualize sustainability in terms of all five dimensions. However the phrase 'community sustainability' has limited resonance and reflects varying degrees of economic expansionist hegemony. Respondents indicate the importance of aspects of social capital and sense of place to community sustainability.

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Chapter One

INTRODUCTION

Sustainable development was first broadly articulated as such by the Brundtland Commission in 1987, though as far as rural communities were concerned, issues reflecting sustainability had been raised well prior. These issues ranged from the gamut of impacts due to energy booms (for example: Cortese, 1979; Little and Lovejoy, 1979; Massey and Lewis, 1979; Weber and Howell, 1982) to impacts due to agricultural restructuring and declining populations (for example: Ginder *et al.*, 1985; Johnson, 1982; Lu, 1985; Swanson, 1977; Swanson, 1980). The noun 'sustainability' has been generally adopted into the discourses of government, business, and industry, and the adjective 'sustainable' applied so broadly that its usefulness as a concept can be questioned. Yet there are those who defend the amorphous qualities of the concept, arguing that ambiguity allows the inclusion of a wide range of disciplines and sectors (Dale, 2001). Simply because a thing is not easily defined does not make it ineffectual.

This study approached community sustainability in full acknowledgement of the indeterminate nature of the concept. Rather than come up with a set definition from the literature, and develop a survey to establish levels of agreement with that definition, I sought to establish individual conceptualizations of community sustainability. This approach allowed for full ambiguity to be displayed and then, through analysis, for the common themes to develop. In developing those ambiguities, it revealed that individuals conceptualize 'community sustainability' along a continuum from its original, counter-hegemonic form emphasizing ecological limits to its more recent form, co-opted by economic expansionism, which denies limits to development and equates sustainability with maintaining the status quo. In assessing individual's conceptualization of sustainability, it was important to consider elements beyond the traditional dimensions[1] and assess possible influences upon that vision. Both social capital and sense of place have been implicated as key factors in achieving sustainable communities (Ambard, 2004; Beckly, 2003; Dale & Onyx, 2005; Hay, 1998; Onyx, 1996; Roseland, 1999; 2005). Each of those two concepts are as broad and ambiguous as sustainability. However, interviews were reviewed for mention of commonly accepted indicators of social capital – participation in groups, commitment to community, trust – and for examples of community level use of social capital as linked to community sustainability. It was recognized that social capital may contribute either positively or negatively to community sustainability and I assessed those indicators and examples accordingly.

Sense of place and attachment to place are concepts that refer to people's feelings about and commitment to, a physical place. The scale of that physical place may range from small – a garden or room in one's house – to large – a city, a national park. Whatever the place, it will elicit some kind of emotional reaction of a personal nature. Both sense of place and attachment to place may be positive or negative. A related area of study is that of community attachment and sense of community. Unlike 'place' studies, 'community' studies more frequently focus on shared social space and common values rather than physical space. However ambiguous the concept of community may be, this study attached the notion of community to a physical space in which social interactions occur. Thus I utilized 'sense of place' to be inclusive of the full range of concepts covering place and community.

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[1] The economic, social and environmental dimensions of sustainability are always considered, with political/governance and cultural dimensions sometimes added.

Utilizing a visual sociology method of photo-elicitation interviews, 23 disposable cameras were distributed to members of the Viking community and participants were asked to photograph that which they considered contributed to community sustainability and that which posed challenges to sustainability. While some aspects of the participants' conceptualization of community sustainability were predictable – presence of the school and hospital were highlighted by almost all participants – others demonstrated a strong grasp of the complexity and ambiguity that encompasses both sustainability and community.

Purpose of the Study

The purpose of this project was to develop an understanding of how the members of a rural Alberta community conceptualize the notion of sustainability *in* their community and whether social capital and/or sense of community is involved in their understanding of sustainability. In investigating the conceptualization of sustainability it was possible to establish the degree to which the phrase 'community sustainability' and the word 'sustainability' is meaningful and engaging to citizens. Further purposes were to reveal whether or not people think of sustainability in terms of various dimensions; and what may be informing particular visions of sustainability, including issues of power, knowledge, agency and structure.

Research Objectives

The intent of this research project was to contribute to the limited literature on citizen conceptualizations of community sustainability and to therefore provide a basis of understanding from which the Viking community, specifically, and rural communities more generally can generate a meaningful and directed plan for achieving sustainability. There were two main objectives directing this project:

1. To explore the topic of community sustainability from the point of view of community members in order to reveal what informs the concept and the dimensions included in its definition.
2. To utilize a methodology that would allow for the greatest breadth and depth of individual conceptualizations to emerge.

Significance of the Study

While there is a wide literature on what constitutes a sustainable community, there is a limited literature on how individuals view sustainability in their own communities. While the purpose of this study was to investigate how the members of the community of Viking visualize sustainability in their community, it was not necessarily to re-define sustainability to match that which people conceive, but rather to identify conceptualizations and what informs them. The significance in doing so would be to identify what gaps there may be between perceptions of sustainability and accepted definitions and indicators thereof.

Despite an increasing use of photography in sociological studies, visual representations of the world have been denigrated as being social constructions because what they reveal is limited to what is in the frame (Prosser, 1998). However, as is this is also true of words – discourse analysis looks at how an issue is verbally framed – it is a poor reason to dismiss the use of visuals in sociological research. The use of photo-elicitation interviews is neither significant nor new per se. However, while photo-elicitation interviews have been used in ethnographies of agricultural communities (Harper, 2001, Schwartz, 1992), those studies utilized photos from archives or those generated by the researcher. The only visual sociology projects utilizing participant-generated photos that were related to community sustainability was one studying agricultural landscapes (Beilin, 2005), one investigating user reactions to a river revitalization project (Gloor and Meier, 2000), and one investigating sense of place (Ambard, 2004). There is also limited literature on community sustainability as understood by community members, and none that I could find utilizing a qualitative methodology. Thus this study is significant in its contribution to the qualitative literature on community sustainability.

The method utilized was effective in engaging participants ahead of time in thinking about a broad and complex topic and in giving the interview a focus point. Pink (2001) and Schwartz (1989) both note that the use of photographs engages participants more than mere interviews alone while Collier and Collier (1986) advocate the use of photographs as a means of focusing an interview. Furthermore, Felstead *et al.* (2004) found the *combination* of the visual and the written to be critical. While interviewing alone yields analyzable results, the synergy created between words and pictures has the potential to access to a much greater extent the complexity of a concept like sustainability.

Research Design

This research project utilized a qualitative research method based on participant-generated photographs. A total of 25 interviews were conducted with 27 participants. Only 23 of the 25 interviews were based upon photographs. With a main purpose of the photography being to engage people in thinking about the topic, for two participants such engagement wasn't necessary due, in the first case, to the nature of the participant's experience in municipal government and in the second case the participant had a post-secondary degree from my *alma mater* – we had taken many of the same courses with the same professors. They expressed an interest in participating but were emphatic about not wishing to do the photography. Rather than lose valuable insight from these people, I elected to forgo the photographic element. For those doing the photography, they were provided with a disposable camera and instructions to take photos representing elements of the community that were sustainable and unsustainable, or challenges to sustainability. Once processed, participants were asked to choose 12 photos to discuss. Lacking training in visual sociology, I did not analyze the photographs in addition to the interview transcripts but they did form an important part of the research process.

Locating the Research and the Researcher: Rationale for the Study

Recognizing that research is anything but objective and that the researcher inevitably influences the research, it is important to identify the researcher's background and motivations. I am a rural Albertan and, with the exception of the years of my undergraduate degree, have called home three different farms outside small towns my entire life. I have lived and worked in rural, agricultural communities in England, Australia and Mexico, experiences which have shown me the marked similarities that agricultural communities share, as well as some of their differences.

Though I have enjoyed being in other parts of the world, I wanted to do my research in Alberta because, barring the unforeseen, it is where I will be living and working for the remainder of my life. It seemed logical to do my research in the jurisdiction in which I wish to work. After a little consideration, I opted to choose Viking as the site for my case study. As far as choice of community was concerned, there were the practicalities of accessibility and choosing a place in which I already knew some people. My hometown would have fulfilled those requirements, though it is further from my residence than is Viking. The choice of Viking was most strongly influenced by a serendipitous conversation with a friend there who discussed that community's struggles with some sustainability issues. It is a community where a core group of people are committed to furthering rural sustainability through personal action and education. The year in which I did my research that group moved from an informal congregation to attaining formal society status as the Rural Outreach and Agricultural Renaissance Society. It occurred to me that the intent of engaging in the project I had proposed was to see it put to practical application. Viking seemed like a community where that would happen and where they welcomed the opportunity to gain a better knowledge of views of sustainability in the community.

My undergraduate degree is in Environmental Science and after attaining that degree I went to work in Environmentally Sustainable Agriculture extension. It was during that work that I became rather disenchanted with the process of extension and government policy. There was no lack of solid science evidencing the benefits of environmentally sustainable agriculture practices. Yet no matter the soundness of the science and the economic benefit of altering practices, it was incredibly challenging to achieve practice change. Hence I became interested in pursuing the topic of sustainability from the broader angle of the whole rural community, rather than merely agricultural sustainability and of the concept generally, not just environmental sustainability, though my conviction remains that environmental sustainability is the base upon which all sustainability rests. Trying to impose sustainable agriculture as an agent of government, municipal or provincial, was ineffective. I was, and am, convinced that we need to understand how individuals conceptualize sustainability and work from that point outwards. Hence I moved my study away from the natural sciences and into sociology.

Currently there is effort in government to implement community sustainability planning across Canada. Under the Canada-Alberta Agreement On The Transfer Of Federal Gas Tax Revenues Under The New Deal for Cities and Communities, 2005 – 2015, the Province of Alberta "will ensure, within the term of this Agreement, that each Municipality develops an Integrated Community Sustainability Plan as the basis upon which they will determine plans and priorities to aid in their achieving sustainability" (Infrastructure Canada, 2005). While the idea of community sustainability planning is laudable, I felt that in order for such planning to be effective in terms of achieving implementation, one ought to start from understanding whether and how community citizens visualize the concept.

The requirement for municipalities nation-wide to develop a sustainability plan is not unrealistic considering that a number of communities, including Calgary and Okotoks in Alberta and Tofino, Ucluelet and Whistler in B.C., already have plans. Numerous other cities, towns and municipalities are in the process of developing one with support from the Green Municipal Fund (GMF). Some of the smaller communities doing so include Gravelbourg, Saskatchewan; Canmore, Alberta; the Municipality of Iqaluit; and the District of 100 Mile House, BC (Federation of Canadian Municipalities, 2008). At a regional level the GMF has provided the Town of Lac la Biche and Lakeland County in Alberta $225,000 to develop a watershed plan (FCM, 2008). It seems evident that communities are recognizing the importance of engaging in planning that it more holistic than traditional land use planning and economic development. The reason for choosing to study rural community *sustainability,* apart from seeing it as applicable in the current policy climate, is that rural community development hasn't worked. A survey of Canadian federal government rural development policies since WWII reveals that:

> Despite the number of docks built, trees planted, fields drained and sewer lines installed, the essential condition of rural life remains largely unchanged. Indeed, if anything, the insecurity of rural Canadians, their families, and communities, has deepened. Their dependency upon "metropolitan" Canada, its values, institutions and power remains. . . And while over-all rural population has stabilized this is very largely the result of an increase in hobby and part-time farming and the gentrification of the countryside surrounding large cities rather than any more substantial change in Canadian rural society (Lapping and Fuller, 1985, p. 117).

Rural development policy has a tendency to reflect macroeconomic policy, such that declining communities cleave strongly to economic development which, in effect, "diverts their attention from the political nature of that decline – their inability to control their own resources and, thus their inability to control their destiny" (Stofferahn *et al.*, 1991). Even where rural development policy is broader in encouraging social development, and local value-adding to primary production, the challenge is that such policy is difficult to achieve in the global macroeconomic context (Eversole and Martin, 2006). Thus, I contend it necessary to abandon development in favour of sustainability which an inclusion of all aspects of community and the context in which it lies.

I am also passionate about the survival of rural communities. Ecological resilience is greatest when species diversity is high. I believe that there are social parallels and that the preservation of a wide variety of community types will make society resilient. At the very least it permits individuals the opportunity to choose a preferred style of life. I believe that rural communities can be sustainable in all five dimensions – economic, environmental, social, political and cultural – and that it is worth the effort of making that journey.

Chapter Two

LITERATURE REVIEW

Background to Sustainability and Sustainable Development

Though 'sustainable development' entered the mainstream lexicon after the 1987 report of the World Commission on Environment and Development, commonly known as the Brundtland Commission, the roots of the concept are much older. Sustainable development has its origins in the environmental movement which itself can be traced back to the antagonism between the preservation and conservation movements of the early twentieth century, represented by John Muir and Gifford Pinchot, respectively (Goldfarb, 2000). The environmental movement became a notable social force in the 1960s and 1970s. From Rachel Carson's (1962) exposé of the toxic effects of pesticides on humans and wildlife to Paul Ehrlich's (1968) and Garret Hardin's (1968) concern with the burgeoning world population to Barry Commoner's (1971) rejection of technologies which generate a perceived freedom from dependence on the environment, all identified areas in which the anthropocentric hegemony of economic expansionism was pushing ecological limits. In 1972, the Club of Rome took into account the issues of population growth, resource utilization and agricultural production, industrialization and pollution in its publication, *The Limits to Growth*. The report suggested that unchanged trends in those five areas would result in the human species exceeding the carrying capacity of the planet (Meadows *et al.*, 1972). In Canada, the Science Council of Canada promoted a conversion from a consumer society to a conserver society which would "act as responsible steward, to make sure to the best of available knowledge that present actions are not setting consequences in train that will impose serious costs on our descendants" (1977, p.24). The 1980 IUCN World Conservation Strategy emphasized that sustainable development could only be achieved through "the conservation of living resources" (IUCN, 1980, p.1). The report pointed to the necessity of integrating conservation and development "to ensure that modifications to the planet do indeed secure the survival and wellbeing of all people" (IUCN, 1980, p.2).

Concerns about sustainability/sustainable development

Following on from that background, the Brundtland Commission's definition of sustainable development as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs"[2] (1987, p. 43), became the baseline definition in virtually all sectors of society. That definition and the subsequent discourse of sustainable development/sustainability has produced a number of concerns. The first is the Brundtland report's denial of ecological limits (Carruthers, 2001; Dale, 2001; Jacob, 1988; McManus, 1996; Rees, 1988; Robinson, 2004). Where prior conceptualizations of sustainability emphasized absolute limits as imposed by the capacity of the earth's ecosystems to support human life and economic activity, the Brundtland Commission negated that view:

> The concept of sustainable development does imply limits – not absolute limits but limitations imposed by the present state of

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[2] 'Our Common Future' had a strong focus on eliminating poverty of underdeveloped nations through increases in economic development (WCED, 1987). While the issues of world poverty and development in the discourse of sustainable development are important and have their own set of critiques and analyses, this research project is limited to the issue of sustainability in a developed world context.

> technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be both managed and improved to make way for a new era of economic growth (WCED, 1987, p.8).

Such denial is related to a second concern: that the concept was easily adopted in all parts of business, industry and government and used to cloak the hegemonic economic expansionist agenda in a coat of social equality and environmental responsibility while failing to address the issues arising from patterns of production and consumption (Aguirre, 2002; Carruthers, 2001; Hall, 1998; Lewis, 2000; Meadowcroft, 2000; Nozick, 1992; Robinson, 2004). This leads to the third concern that the discourse of sustainable development fails to address issues of social equity (Allen and Sachs, 1992; Lewis, 2000; Meadowcroft, 2000; Robinson, 2004). That is, that the issues of race/ethnicity, class and gender and the underlying structures of power and privilege are not challenged by sustainability discourse. A media study supports these concerns, demonstrating that the media's presentation of sustainable development reinforced the status quo rather than presenting challenging views (Lewis, 2000). A final concern, which embodies all the others is that the concept is very vague. A 1996 study found at least 80 definitions, many of which were irreconcilable (Fowke and Prasad cited in Williams and Millington, 2004). These conflicting definitions have arisen due to the evolution of the concept over time from the more contained definition relating to environmental limits to the more recent, and rhetorical, use that fails to address social and environmental problems (Aguirre, 2002). However frustrating that lack of clarity, a dearth of definitional rigour is not seen as a problem by all authors, but rather a strength in that it allows for and encourages ongoing dialogue between many sectors (Dale, 2001; Robinson, 2004; Williams and Millington, 2004).

Hegemony, Discourse, Power and Knowledge

The word 'hegemony' comes from the Greek *hēgemonía* meaning leadership or supremacy (Stein and Urdang, 1966). Its use as a political and sociological concept has roots in historical materialism and expresses the universalization of the interests and ideas of the ruling class (Scott and Marshall, [illegible]05). The general consent or acceptance of an idea as universal allows power to be maintained without coercion. Hegemony is a critical concept in an investigation of sustainability/sustainable development as it is a useful framework in which the evolution of the knowledge and discourse of sustainability/sustainable development occurs. If hegemony is considered the framework on which the universalization of an idea rests, a variety of interrelated discourses serve as its foundation. Knowledge is formed within a discursive field (Foucault, 2003 [1968], p. 412-417). Truth is knowledge that has been broadly accepted and is therefore a production of power. Truth and knowledge exist in a reciprocal relationship with power: "we are subjected to the production of truth through power and we cannot exercise power except through the production of truth" (Foucault, 1980 [1976], p. 93). The discourse of economic growth fits within Western society's "regime of truth. . . – that is, the types of discourse it accepts and makes function as true; the mechanisms and instances that enable one to distinguish true and false statements; the means by which each is sanctioned" (Foucault, 2003 [1976], p. 316). Thus the discourse of limitless economic growth is accepted as true due to the fact that it fits within the hegemonic worldview of economic expansionism. Hegemony circumscribes the regime of truth. In order for sustainable development discourse to be accepted as truth it is necessary for it to fit economic expansionist hegemony.

The original discourse of sustainable development based upon ecological limits arose to counter the socially and politically sanctioned discourse of economic growth. Sustainable development itself, is a counter-hegemonic concept. However, it has not yet achieved truly counter-hegemonic proportions; it failed to threaten the existing hegemony with replacement because it was not broadly accepted throughout civil society. That is to say that the original sustainable development discourse did not achieve the full status of truth and was instead annexed by the discourses supporting economic expansionism. Power is exercised at the level of the individual (Foucault, 1980, p. 39) and civil society is the vehicle for hegemony: "private or personal aspects of daily life are politically important aspects of the operation of power" (Ives, 2004, p. 71). Thus without the 'consent' of civil society, sustainable development, in its original formulation failed to be counter-hegemonic. However, the original formulation of sustainable development is by no means extinguished; it remains as an alternative discourse of truth. Foucault points to the fact that while discourses are made to function as true through a "regime of truth," alternatives are put forward in what he calls "games of truth" (2003 [1984], p. 37). Thus, his example of the environmental movement, in opposition to a technological truth claim, "articulated its own discourse of truth . . . . by pointing out that there are other reasonable options" (*ibid,* p. 37). The environmental and social justice movements continue to articulate sustainable development as their own alternate discourse of truth.

Foucault (2003 [1976]) presents five traits of truth:

> "Truth" is centered on the form of scientific discourse and the institutions that produce it; it is subject to constant economic and political incitement (the demand for truth, as much for economic production and for political power); it is the object, under diverse forms, of immense diffusion and consumption (circulating through apparatuses of education and information whose extent is relatively broad in the social body, notwithstanding certain strict limitation); it is produced and transmitted under the control, dominant if not exclusive, of a few great political and economic apparatuses (university, army, writing, media); finally, it is the issue of a whole political debate and social confrontation (p. 316).

Though it was not broadly accepted as truth, and therefore failed to achieve the status of counter-hegemony, the alternative discourse of sustainable development had the *potential* to become counter-hegemonic, or to at very least to challenge the legitimacy of economic expansionism by standing in opposition to the relations of power that allowed for expansionism and exploitation. Through co-opting it, and elaborating a sustainable development discourse supportive of economic expansionism, such threat was nullified. None-the-less there remains a discourse of sustainable development/sustainability counter to that of economic expansionism. It is not dominant, it does not support the hegemonic worldview but its existence ensures a continuing tension between competing discourses which allows for the opportunity for the continual reshaping of knowledge.

One can see all five traits of truth contained within the co-opted sustainable development/sustainability discourses – there is more than one, as noted above with the concern about the wide variety of meanings of the concept. With regard to the first characteristic, sustainability/sustainable development, growth, etc. is based upon a scientific discourse, primarily that of technological development and mitigation, notable in the above quote from the Brundtland Commission. The Brundtland report can be seen as the turning point at which the concept of sustainable development shifted from being counter-hegemonic to evolving into a discourse used to legitimize the anthropocentric hegemony of economic expansionism: "Today's sustainable development is premised on precisely the same economic injustices and biophysical impossibilities as the dominant discourse it once rose to oppose" (Carruthers, 2001, p. 105). Meister (1997) similarly claims that U.N. sustainable development/sustainability discourse emphasizes the economic through "encouraging a dependency on science and technology" (p. 231). Growth can be unlimited because technology makes it possible to do so and/or to mitigate any consequences. For a concrete example, Suncor Energy, which self identifies as a "sustainable energy company" (Suncor Energy, Sustainability, no date), is proposing to expand its development in the oilsands of Northern Alberta, a resource whose extraction is costly environmentally (Dyer *et al.*, 2008) and socially (for example, CBC News, Nov. 22, 2006). Yet it claims that "new ore-preparation and extraction technologies – among others – are key to the Voyageur South proposal, designed to mitigate environmental and socio-economic impacts, with reduced energy consumption, reduced emissions and reduced labour requirements" (Suncor Energy, Oilsands, no date). Scientific discourse props up the hegemonic version of sustainable development.

In the second trait of "economic and political incitement," not only does the coopted discourse grant economic and political legitimation, it validates itself as truth through examples of circular reasoning. The above example from Suncor demonstrates this kind of truth-making. The company's actions are sustainable – and are detailed in an annual Sustainability Report – because Suncor is a sustainable company, and vice versa.

Thirdly, variations of the term sustainability are used widely, if frequently inappropriately, through all sectors of society – for example the Cooperators Insurance Company produced a Sustainability Report (2007) which for all intents and purposes was an annual report including sections on corporate responsibility (social and environmental), economic performance and client relations.

Fourthly, this particular sustainability discourse does emanate from political and economic structures, noted in Lewis' (2000) assessment of sustainable development in the media. Certain university departments do still educate their students about the original discourse of sustainable development. Finally that which constitutes sustainability is an arena for debate due to there being various formulations of the concept.

As an alternative discourse of truth, sustainable development both springs from and takes on the characteristics of a local, subjugated knowledge. A corollary exists with local ecological knowledge in Canada's east coast fisheries that was not taken into account in fisheries management and setting Total Allowable Catch (Finlayson, 1994 cited in Murray *et al.*, 2004, p. 565). However, local knowledge is dynamic and context dependent, evolving in relationship with a variety of increasingly diverse actors (Murray *et al*, 2004). Thus, though the purpose of Foucault's genealogy of knowledge is "a reactivation of local knowledges . . . in opposition of the scientific hierarchisation of knowledges and the effects intrinsic to their power" (Foucault, 1980 [1976], p. 85), there is a question of locating that knowledge in its context and recognizing where it exists in relations of power. Opposition is not to the contents of scientific knowledge *per se* but to its effects in structuring relations of power (*ibid*, p. 84). In Gale and Cordray's (1994) identification of nine types of sustainable resource management, the rationale behind 'what is to be sustained' in each type demonstrates the argument that many current discourses of sustainability fail to address causes of unsustainability, which ultimately supports the dominant and oppressive relations of power. The need, and purpose of, sustainable development is to oppose economic expansionism and corporate domination to bring focus back to local, and hopefully, more equal relations of power.

The alternative discourse of sustainability/sustainable development remains (see selections in Aberley, ed., 1993; 1994; Pierce and Dale, eds., 1999; also Maser, 1997; Sale, 2000). There are published 'guide books' developed for community leaders interested in implementing steps toward sustainability. These books very much emphasize environmental limits, in addition to social responsibility for current and future generations (James and Lahti, 2004; Maser, 1997; Roseland, 1997; 2005). Many academic authors acknowledge the weakness of the current dominant discourse of sustainable development/sustainability (Allen and Sachs, 1992; Dale, 2001; Gale and Cordray, 1994; McManus, 1996). Yet they do not suggest abandoning the concept all together. McManus (1996) recognizes multiple approaches to sustainability beyond the economic-centred approach. He suggests that the principle of 'sustainability' be adopted in place of 'sustainable development' as the latter has been co-opted by international capitalism such that 'development' has been interpreted as 'growth.' Such development is anthropocentric, lacking a sufficient regard for human relationship with the natural world. It also avoids addressing social issues of entrenched power and privilege allowing continued domination of those who are peripheral, marginal, or otherwise subaltern (Allen and Sachs, 1992; Redclift, 2005; Robinson, 2004).

While 'sustainability' is sometimes presented as the preferred term in order to regain a discourse that is centred on human society living within ecological carrying capacity, and that is counter to the hegemony of economic growth (McManus, 1996; Robinson, 2004), as the two terms are used so interchangeably, it is unlikely that adoption of one term over the other will definitively affect lay discourse. As a case in point, my research project asked participants to consider community sustainability. None of them used the term 'sustainable development,' yet many responses using the term 'sustainability' reflected the economic expansionist worldview.

General parameters and discourses of sustainability/sustainable development

Though definitionally vague, there is consensus on those dimensions which comprise sustainability/sustainable development. It is generally thought to consist of three main dimensions – social, economic and environmental - with the cultural and political sometimes considered separately from the social. Yet addressing the question of 'what is to be sustained' is an exercise in which, in current isolationist structures of government, academia and business – and in spite of ostensibly inclusive sustainability policies (Meadowcroft, 2000) – one sector frequently achieves domination over others (Dale, 2001). Consequently, rather than being integrated, the dimensions are in competition and conflict (Lehtonen, 2004). Gale and Cordray (1994) identified nine sustainability types in a natural resource management context, asking questions including: 1) 'what is to be sustained'; 2) 'why sustain it'; and 3) ' what are the politics.' The normative issues surrounding the answers to those questions are evident and can result in irreconcilably oppositional types of sustainability. Furthermore these are questions whose answers are unlikely to be fixed in time and space. Gale and Cordray's (1994) nine types or discourses reflect Cocklin's (1995) six academic discourses of sustainability. Neither author could identify a discourse that fully encompasses all three components of sustainability. In all the many discourses of sustainable development/sustainability, that which is dominant supports the economic expansionist agenda. This is evident in McGregor's (2004) investigation of discourses of the environment. He found that the discourse of sustainable development was dominant and that components of other discourses that supported sustainable development were given prominence over those discourses that did not, or those discourses which supported a definition of sustainability not held by the participants. The dominant discourse of environmental issues may be sustainable development but it is a discourse of sustainable development in which the environment is not dominant but framed in economic terms of value.

Though sustainability is considered to include social, economic and environmental dimensions, the social hasn't had as much attention as the other two (Day, 1998; Scott *et al.*, 2000). Social sustainability is "a state in which a society is able to function to the material, social, cultural and spiritual satisfaction of its members over an indefinite time-span, without net depletion of the national physical resource base or debasement of the ecological life support systems" (Smailes, 1995, p. 141). Jones and Tonts (1995) and Fuller *et al.* (1989) similarly point to the interconnectedness of the three components: achieving social sustainability without sustainability in the other two is an impossibility. Key societal features that are identified as necessary contributors to social sustainability include: 1) maintaining small, locally owned businesses as an integral part of the economy (Scott *et al.*, 2000; Smailes, 1995); 2) ensuring opportunity for local interactions and the development of local identity (Jones and Tonts, 1995; Scott *et al.*, 2000; Smailes, 1995); 3) conserving the foundation from which traditional values evolve, maintaining the distinctive rural values and worldview (Jones and Tonts, 1995; Smailes, 1995); and 4) fair division of responsibility and resources between all levels of government (Smailes, 1995) which includes not fostering a culture of dependency on federal governments (Bryant, 1999; Douglas, 1989; Sim, 1988).

Social interactions are reflective of social networks. Again verifying the interdependence of the three components, local economic development has been demonstrated to be more effective when it is built upon local social networks and cultures – including shared norms, symbols, understandings, a sense of loyalty and belonging – and by strengthening local institutional linkages, than when development is driven by external forces (Bridger and Luloff, 2001; Bryant, 1999; Day, 1998; Everitt and Annis, 1992). However, it is necessary to analyze the power structure of these networks in order to establish who and what are being both excluded and included (Bridger and Luloff, 2001; Bryant, 1999; Day, 1998).

Individual Perceptions of Sustainability/Sustainable Development

A number of studies have looked at how individuals in various roles perceive of or use discourses related to community or sustainability (Conroy, 2006; Dair and Williams, 2006; Hanna, 2005; Jones, 1995; Macnaghten, 2003; McGregor, 2004; O'Toole *et al.*, 2006; Pepperdine, 2000). When investigating sustainability discourse, the first issue is whether the concept itself has any resonance. O'Toole *et al.* (2006), studying residents in the south west region of Victoria, Australia, found that 29 percent of their respondents had no understanding of the term 'sustainability.' Conroy's (2006) study of American planning directors showed that 66 percent had a familiarity with the concept of sustainability yet more than half of those same respondents "estimated that less than 25 percent of their organization was familiar with the concept" (Conroy, 2006: 22). She notes that for one planner the use of the term was unfamiliar, though the concepts behind the term were familiar; another didn't like to use 'sustainability' as it was considered jargon. My respondents, particularly the youth, also had not encountered the term 'community sustainability' prior to being asked to participate in this study but were likewise familiar with some of the concepts behind it. Other participants identified that issues of sustainability were frequently addressed in various organizations but without the terminology.

When it comes to individual conceptions of sustainability, knowledge tends to be divided into lay and expert categories. Expert knowledge, and hence discourse, is generalizable, rational, and systematic while lay knowledge is specialized, having been developed in a specific context (Healy, 2004; Jones, 1995). These two categories of knowledge loosely correspond to Foucault's categories of scientific knowledge and subjugated knowledges. Even though lay knowledge is acknowledged to be contextualized and made to fit individual values and worldviews (McManus, 1996), even expert knowledge, when applied to as ambiguous a concept as sustainability, can represent a "transformation of meaning to suit [different experts] views of how the world operates" (Aguirre, 2002, p. 106) in what can be a fairly procrustean manner. That is to say that sustainability is modified to fit an existing discourse of truth. How we conceive of and enact sustainability may be limited. How our choices and decisions affect others, especially distant, or external, others – either spatially or temporally – are rarely visible (Redclift, 2005) and few countries, with the exception of the Netherlands and Sweden, engage in public education that would allow for such informed decision making (Meadowcroft, 2000). As we do not engage with those outcomes, they may not be reflected in our concept of sustainability, at least not at the scale of local, community sustainability. Macnaghten (2003) found that, as far as environmental discourse, people related to and valued those environments in which they had personal and frequent experience more than general abstractions of the environment.

In Pepperdine's (2000) identification of themes of social sustainability, the only acknowledgement of the 'external' is in the theme "sense of future." A few participants in my study identified 'external' others as part of sustainability, though did not connect spatially distant others with *local* community sustainability. All participants making those observations had a university education, hence the context of their knowledge development reflects a degree of expert knowledge – in their cases a more counter-hegemonic knowledge. Other studies of individual perceptions of sustainability do not demonstrate any inclusion of the 'external' in sustainability (Conroy, 2006; Dair and Williams, 2006; Hanna, 2005; O'Toole *et al.*, 2006).

Due to the broad nature of the general definition of sustainability, when individuals use the term, there is an initial assumption that there is a common understanding or knowledge of the concept. However if it becomes necessary to find a consensus definition, the normative nature of the concept becomes evident (Hanna, 2005). Sustainability/sustainable development has been identified as having normative, ethical and moral elements (Aguirre, 2002; Beckerman, 1994; Dale, 2001; Jacobs; 1995; Skolimowski, 1995)

The comments of Hanna's participants on defining sustainability in a community planning process indicate that the term became problematic once it became necessary to define for the purposes of planning. The contextual nature of knowledge of sustainability was apparent: "Everyone had a different approach based on their experiences" (Tofino respondent in Hanna, 2005). Dair and Williams (2006) looked at the degree to which brownfield developments achieved sustainability. They conceded that "perhaps the most fundamental explanation for variation in sustainability is simply stakeholders' attitudes towards, and *knowledge of the issue*" (2006, p.1363, emphasis added). The general aim for a successful outcome was not necessarily correlated with a sustainable outcome, a concern also articulated by Conroy (2006: 25) who noted that planners connote sustainability as "analogous to traditional good planning practices." Hence a definition of sustainability that is contextualized in experience steeped in hegemony is more likely to reflect the status quo. That said, if the experience with hegemony is a negative one, then one may find a definition of sustainability that reflects the opposite of the status quo. An example would be farmers I know who, finding themselves in the position of having to change something or leave farming, have turned to organic agriculture. In those cases economic expansionism was less hegemonic than it was coercive. It may be that hegemony, which by necessity implies consent, produces definitions of sustainability more reflective of the status quo while experience with coercion produces the opposite.

Though policy and academic conceptions of sustainability include the three dimensions of environment, economy and social, Cocklin (1995) identified that discourses of sustainability in six academic literatures – environmentalism and ecology, resource science, neoclassical-economic, ecological economics, political-economic and postmodernist – failed to address all three adequately. The question is how frequently, if at all, do individuals include all three components in their conceptions? O'Toole *et al.* (2006: 33) found that 36 percent of their sample provided definitions of sustainability that were not specific to any of the components; of the 35 percent who identified specific components, 31 percent identified environment; 15 percent identified either social or economic; 15 percent identified the two components of environment and economy; nine percent identified any other combination of two components; and only six percent identified all three. Though Pepperdine's study focused on issues of social sustainability, both environmental and economic issues were raised as being vital to social well-being, suggesting that respondents had an understanding of sustainability that encompassed all the components. However this represents the whole sample as percentages were not provided; only topics identified were listed. Thus it seems likely that while separate individuals may not integrate all the components of sustainability, within a locality all the components will be addressed providing that people have an opportunity to express their views. Certainly, once my data was amalgamated, all the dimensions of sustainability were represented.

Agriculture and Sustainable Communities

Being that, at least historically, Alberta communities in the Prairie and Parkland ecoregions were agriculturally based and continue to support agricultural activity, an assessment of community sustainability would include an assessment of agriculture's contribution to community. Though the oil and gas industry has nearly as long a history in the area, its role in community sustainability is not examined in this study. The focus on agriculture is due to its being a production activity with as much social influence as economic, and its nature in grounding people in a community. The oil and gas industry seems to have a tendency towards a greater transience as workers follow field development.

Neoliberal Globalization and Agriculture

A preface of the full adoption of neoliberal principles of restructuring and deregulation in Canadian agriculture occurred with the 1969 Report of the Federal Task Force on Agriculture which recommended that "younger, non-viable farmers should be moved out of farming" (p. 10). Small farms whose incomes were not considered "viable" were to be phased out in order to attain the 1990 model which would have "decreasing numbers of farms, farmers, farm labour force and farm population" and "fewer family farms" (Federal Task Force on Agriculture, 1970, p.8). While the Task Force considered it acceptable for mid-sized farms to sustain themselves economically by supplementing their incomes with off-farm work, this was not an acceptable option for small farmers. They were to be moved off the land and educated for the urban job market (Federal Task Force on Agriculture, 1970). Their land would be put to better use as part of a larger operation. From the 1971 census to the 2006 census the number of Canadian farms was reduced by 37 percent while the number of Alberta farms was reduced by 21 percent (Statistics Canada, Census of Agriculture, 2007a).[3] In Alberta, the number of farms peaked in 1941 at 99, 742. In 2006 the number of farms was 49, 431, less than half the peak numbers.[4] Over the same time period, average farm size more than doubled from 434 acres to 1,055 acres (Statistics Canada, Census of Agriculture, 2007a).

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[3] Due to a greater percentage loss of farms in the Maritimes over that time period, the Canadian average is higher than the Alberta average.

[4] While the definition of 'census farm' has changed from 1941 to 2006, the current one is the most inclusive definition to date. In 1941 a census farm was "a holding of one acre or more that produced, in the year prior to the census, agricultural products valued at $50 or more, or that was under crops of any kind or used for pasturing in the census year" (Statistics Canada, 2007a). From 1996 onward, a census farm has been "an agricultural

The 1980s saw the decline of the welfare state and the rise of neoliberal globalization, characterized by decentralization of government authority and privatization of previously public services. While the effects of globalization are not limited to agriculture, for those communities with an agricultural base there is a compounding effect as they are impacted both directly from neoliberal policies and indirectly through those policies effects on agriculture. Rural communities are also affected by industrialization, environmental and social degradation and a loss of community control in decision making (Nozick, 1992). A similar loss of control is experienced in agriculture as industrialization has led to decision making centred outside the rural sector (Troughton, 1990). Ironically these deleterious policies have not been forced upon the North, as they have upon Southern nations forced to adopt structural adjustment, rather the North has voluntarily taken decisions to reduce government services and support, for farmers and non-farmers alike (Buckland, 2004; Sumner, 2001).

Economically, neoliberal globalization has impacted community sustainability. The capital mobility of distant, urban-based multinationals has implications for community sustainability as control of the local economy is lost (Dykeman, 1990; Nozick, 1992; Sumner, 2001). Furthermore as national economies are linked, the fluctuations in one affect many. Not only has the market has become the defining force in agricultural relationships, "the worth of a

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operation that produces at least one of the following products intended for sale: crops (hay, field crops, tree fruits or nuts, berries or grapes, vegetables, seed); livestock (cattle, pigs, sheep, horses, game animals, other livestock); poultry (hens, chickens, turkeys, chicks, game birds, other poultry); animal products (milk or cream, eggs, wool, furs, meat); or other agricultural products (Christmas trees, greenhouse or nursery products, mushrooms, sod, honey, maple syrup products)" (Statistics Canada, Census of

farmer's produce has become as much a function of currency markets as it is of the inherent productivity of the farm operation (Flora *et al.*, 1992, p. 147). Consolidation in the agricultural sector is not limited to increasing farm size but also to those agri-businesses selling inputs and those buying agricultural products.

A form of consolidation is vertical integration which occurs when an individual or company has ownership control of several stages in the production process of a commodity. For example, the corporation Cargill produces animal feed, feeds and processes cattle (Heffernan, 1999). In the hog industry, the Saskatchewan Wheat Pool[5] bought feed grains through Canada's largest elevator network; it owned CanGro processing, one of Western Canada's largest producers of animal feed; it owned barns through its Heartland Livestock subsidiary; it owned livestock-sales facilities (National Farmers Union, 2000); and until 2001, it had a 45% ownership share of packer Premium Brands Inc. (Qualman, 2001). The newly formed Viterra "owns and operates a comprehensive network of grain handling and marketing terminals, retail outlets and value-added processing facilities. . . Viterra is connected to customers at each stage of an integrated pipeline that starts with farmers and ends with destination customers" (Viterra, Corporate Profile 2008, p. 2). The implication of vertical integration is evident in Viterra's words of welcome: corporate involvement at every stage of production contributes to the loss of smaller farms, as individuals making an income from only one level of the production process cannot compete. When prices are low for a commodity, an independent farmer may be forced out of business while a vertically integrated company can still

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Agriculture, 2007a).

[5] In the summer of 2007 the Saskatchewan Wheat Pool took over Agricore United to form

make a profit at the processing end of its production (Qualman, 2001). Such is evident in Viterra's 2008 first quarter report in which they note a loss in non-feed gross profit due to an equity investment in Puratone (hog production and animal feed company) reflecting a poor hog market. Yet overall, the company reports increased revenue.

In addition to reducing the number of people in a community, there is a further implication to community sustainability in that profits accruing to a vertically integrated corporation do not stay in community in which the livestock was raised or processed.

The Canadian farm input price index showed that "farmers were subject to large increases in operating expenses between 2000 and 2005. For example, fertilizer and fuel prices were both up about 35% and pesticides were up 19%" (Statistics Canada, Census of Agriculture, 2007b). In comparison, the consumer price index on all items was only up 12.2% (Statistics Canada, Census of Agriculture, 2007b). Farmers, whether trying to build up their enterprises or winding down, identify the combination of low commodity prices and high input prices as the greatest challenge facing farming (Smithers *et al.*, 2005).

Government, Agriculture and Community

The continued erosion of farm population has been aggravated by neoliberal policies in two ways:

> First, accenting markets, trade and modern technology has meant that other, more fundamental means to farm improvement have been overlooked. Second, neoliberal policies have relied on markets, trade and modern technology without ensuring that markets are competitive, trade is fair and new technology benefits farmers and consumers (Buckland, 2004, p. 195-96).

Viterra.

Producers recognize and are frustrated by the contradictions of the discourse of market competition and the reality of monopolies and monopsonies (Alberta Research Council, 2006). Furthermore, the argument that agricultural producers need to continue to adopt technologies and economies of scale to achieve greater efficiency has been shown to be specious. The National Farmers Union (2003) cites numerous government and NGO studies showing that agriculture has the greatest productivity, and hence efficiency, of any part of the business sector. They argue that the only input the current system is reducing is the use of farm families. Farmers feel that there is greater government support, and perhaps preference, for corporate style farming (Alberta Research Council, 2006).

Government policies in agriculture have been contradictory in terms of establishing sustainable agriculture and concomitant sustainable communities. From the Task Force on Agriculture to Alberta Agriculture Department's "Growth Strategy" which outlines necessary objectives to attain a $10 billion primary agriculture industry by 2010 (Alberta Agriculture, Food and Rural Development's, 2004), production is the primary goal. Programs, such as the Alberta Environmentally Sustainable Agriculture program, which ought, ostensibly, to contribute to sustainable agriculture, are failing to do so to any significant extent. The program's goal is "to develop and deliver collaborative environmental stewardship initiatives that result in sustainable *growth* of Alberta's farm, ranch and agri-food processing industry" (emphasis added). Furthermore, their mission includes a statement that "we address environmental challenges in ways that also contribute to the industry's economic and social viability" (AESA, no date). From the overarching Department strategy, it is clear that "growth" means economic growth and thus it is demonstrated that the sustainability discourse of the Department and its programs is the co-opted economic expansionist form. This promotion of a productivist paradigm is not only harmful in that it twists sustainable development to the economic growth hegemony but it promotes social status for those producers conforming to that paradigm (Burton, 2004). Producers recognize this lack of real commitment to either the environmental or social components of sustainability, indicating that government policies are contradictory to conservation (Alberta Research Council, 2006, p. 63-65) and that social viability of the industry is hardly being attended to: "They're [government] implementing policies that break down the infrastructure . . . Are we being told that generations of people made the wrong choice to live in rural Canada?" (participant in Lind, 1995, p. 90). Even extensionists fault the government's exclusive focus on production (Alberta Research Council, 2006, p. 57). Lack of support for agriculture as a social, ecological and economic enterprise has resulted in the loss of people on farms and consequently affected those centres on which they relied for services. With dwindling populations, and the decline of the welfare state, services are removed, other businesses close and the town slowly decays, a process evident in rural regions from Australia to Canada (Lawrence, 1990; Jones and Tonts, 1995; Vanclay and Lawrence, 1995). Further, it is argued that, in spite of the obvious flaws of capital intensive agriculture and it social and environmental consequences that the state cannot intervene because it "is structurally bound to the present pattern of accumulation in agriculture and is, therefore, incapable of altering the 'high tech' trajectory" (Lawrence, 1990, p. 117).

In fact the commitment to that 'high tech' trajectory is such that of those responses to environmental problems produced by industrial farming, it is the high tech options which receive the greatest amount of government support. In the example of solving the problem of soil erosion, it is the response of zero-till with its expensive seeding equipment and increased herbicide application that the government favours and actively supports over the response of organic farming (Beckie, 2000; Alberta Research Council, 2006). Even information on alternative forms of agriculture is lacking in government extension (Alberta Research Council, 2006, p. 61).

Sustainable or Conventional Agriculture and Community Sustainability

As with any use of the adjective 'sustainable,' it is necessary to denote its meaning. Sustainable agriculture has been defined as including any or all of the following characteristics: 1) increased profit margin through cost reduction; 2) implementation of environmentally beneficial practices in place of more harmful ones; and 3) utilization of ecological systems and cycles – biological pest control, diversity in crops and animals, enhancing water and nutrient cycles, for example (Bird, *et al.*, 1995). Conventional agriculture is

> an industrialized agricultural system characterized by mechanization, monocultures, and the use of synthetic inputs such as chemical fertilizers and pesticides, with an emphasis on maximizing productivity and profitability. Industrialized agriculture has become "conventional" only within the last 60 or so years (Eicher, UC Davis Cooperative Extension, 2003).

While numerous authors, and journals, address the topic of sustainable agriculture, the connection between sustainable agriculture and sustainable communities have not had the same attention (Gertler, 1999). With regard to the effects of traditional agriculture and farm consolidation on community there has been more research. The first notable contribution to the literature on the topic was from Walter Goldschmidt (cited in Jackson-Smith and Gillespie, Jr., 2005) who contrasted two American towns in the 1940s, one surrounded by family farms, one by larger farms that relied on hired labour. He concluded that the community of family farms was socially and economically better off than the other. Subsequent studies on this Goldschmidt thesis have shown mixed support (Jackson-Smith and Gillespie, Jr., 2005). In a brief review of the Goldschmidt thesis I found one article which, though supportive of his hypothesis and the need to investigate the consequences of various styles of farming on community, demonstrated substantial flaws in Goldschmidt's methodology, such that the communities he chose were not sufficiently closely matched to permit comparison (Hayes and Olmstead, 1984). Another study of the industrialization of hog farms supported Goldschmidt (Durrenberger and Thu, 1996), while two others concluded that Goldschmidt could not be supported in his hypothesis that large farms have an adverse effect on rural communities (Barnes and Blevins, 1992; Harris and Gilbert, 1982). While not directly comparing family-farm communities with industrial ones, Bennett's (1982) study of Saskatchewan's agrifamily system did note a similar tension. The extension agent was representative of that tension between family and industrial farming in his dual roles, on the one hand "fostering organizations imbued with a bucolic version of *Gemeinschaftliche* virtues" (Bennett, 1982, p. 121) while on the other "encourag[ing] a commercialized, profit-making, efficiency-oriented approach to farming" (Bennett, 1982, p. 121) which negatively impacted the aforementioned organizations and their values.

In a survey of studies, Goreham *et al.* (1995a) could find no agreement upon the effects of farm size on rural community viability, though they, themselves are inclined to support the position that increasing farm size has had a negative effect on rural American communities. Jones and Tonts (1995) make a similar observation regarding the Australian wheatbelt. Lobao and Meyer (2001) note that the latest studies of industrialized farming show a variety of impacts of farm structure on community. Furthermore, as agriculture contributes less and less to community income, it is difficult to link a community's economic well-being with that of its farms (Jackson-Smith and Gillespie, Jr., 2005).

With regard to sustainability and farm size, Goreham *et al.* (1995b) note that sustainable farmers usually farm smaller acreage than conventional farmers. Thus an increase in sustainable farming would bolster falling populations. Furthermore, a four state study of sustainable farmers' trade patterns concluded that "as [sustainable] farmers make . . . purchases more often and spend more per acre, [e]xpansion of sustainable farming promises to stimulate more sales of locally produced items and thus should help retain more dollars in local economies" (Goreham *et al.*, 1995a, p. 143). Flora (1990) also notes that an increase in sustainable farmers would allow for the development of supporting business, such as firms specializing in Integrated Pest Management, which would contribute to sustaining community. Conversely, for communities closely connected to conventional farming, that relationship has become problematic in that the changed nature of conventional farm economics has meant that small centres aren't benefiting economically from farm trade (Liepins, 2000).

In terms of social impacts, while sustainable farmers are no more likely than conventional farmers to be active in their community, neither are they less likely to be so (Goreham *et al.*, 1995b). Hence, as the same land base would support more sustainable than conventional farmers, it is presumed that sustainable agriculture would contribute to a broad membership in community activities. Rather than looking at farm type, *per se*, Smithers *et al.* (2004) looked at farm trajectory – expanding, stable or contracting – and found that those least involved in the community were expanding while those most involved were contracting[6]. Type of farm will also affect how farm and community interact. Those communities in which intensive livestock operations are established tended to demonstrate social polarization between intensive livestock operators and the rest of the community (Lobao and Meyer, 2001).

Scale

Scale is another issue relating to understanding sustainability. Economic activity and environmental issues occur from local to global scales. However, looking to the social, at least in terms of identity, the scale is far more local (Buttimer, 1998). Nonetheless the local is not important solely for social identity. While acknowledging the nested nature of the scales of sustainability, implementation of sustainable development initiatives at the local level are emphasized (Bryant, 1999; Everitt and Annis, 1992; Maser, 1997; Nozick, 1992; Roseland, 1994). Without dismissing the need for governments and international organizations to be involved in sustainability initiatives at larger scales, it is due to the fact that sustainability must be recognized and implemented at the local level that this study focused on community members' understanding of sustainability. Herein also lies the recognition that in addition to scale, issues of sustainability are place dependent. Place, too, exists at many scales. For the purposes of this study, however, place is limited to the physical location of a community.

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[6] It was those in the 'forced down' contracting trajectory, whose income came mainly from off-farm sources and farming was contracting due to debt that were more active in

Rural Community

The phrase 'rural community' contains two concepts of broad and debatable definition and hence the assumptions of the researcher must be made plain. Though not a concept upon which the research focused, it is worth noting that there seems to be general agreement that 'rural' is a constructed social representation (Halfacree, 1993; Jones, 1995; Mormont, 1987; Murdoch and Pratt, 1997; Schucksmith, 1994), though *what* that representation is, is rather more disputable. My participants used the word rural in two ways, one as an unexplained adjective with an assumption of shared understanding (Halfacree, 1993). There is a symbolism to rural and when a particular rural experience is shared, in this case agriculture, there is an assumption of mutual understanding: "And you feel the same way because anybody that comes from that rural background will understand about land" (rural agricultural male). The second use was as a contrast with the urban: 'rural' and 'small town' were synonymous.

Community can occur on many levels and scales including activity-based or belief-based communities which may be defined by geography or personal choice and which are characterized by varying degrees of interaction (Brint, 2001). However, while the dispersion of community in space has been argued for some time (Bernard, 1973; Brint, 2001), territorial community remains:

> "At the local community level there is confrontation, visual if not tactile, emotional if not intellectual. People still live next door to others, they eat, sleep, love, hate, avoid, or seek one another in a given locale. Whether or not they have much to do with their neighbours, they use the same grocery store or supermarket, attend the same movie houses, and patronize the same beauty parlours or barber shops. Owners or renters, they depend on the same community services . . . However emancipated from spatial barriers and however independent of locale the elite may be, it is

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community. Those who were contracting through winding down to retirement had not increased community activity as much (Smithers *et al*, 2004).

> still on the community scene that for most human beings interaction takes place" (Bernard, 1973, p.187)

Territorial community is particularly applicable to agriculture, as it is an enterprise tied to land.

Though existing in space, there are no geographical boundaries to community (Wilkinson, 1991) but rather the community's boundaries and, indeed, community itself are mental constructs identified symbolically (Cohen, 1985). Yet the mental construction of community does not deny locale, as it is through interaction that symbols of community and boundary are constructed and understood. People and community co-define each other (Maser, 1997). Though the town of Viking and its surrounding countryside were the chosen territorial locale for my research, non-geographical boundaries were evident. There was explicit expression of 'them' and 'us' in some interviews. Because my sample was developed through snowballing, it is truly representative of one mental community: participants never suggested one of 'them' for inclusion in the project. However representative it is of a 'mental' community, it is not as representative of the physical grouping of people living in the single locale of Viking and area.

Sense of Place and Community

Sense of place has been identified as an important element contributing to sustainability (Beckley, 2003; Hay, 1998). Having chosen to study community sustainability, the place in question was fixed at the outset of the study. However, 'place' and 'community' occupy different fields of sociological study, with place typically connoting a physical space given meaning "through personal, group or cultural processes" (Altman and Low, 1992, p. 5) while community connotes social networks. Hence the concepts *experience of place* (Hiss, 1990; Tuan, 1975), *sense of place* (Buttimer, 1980a; Hummon, 1992), *place attachment* (various authors in Altman and Low, 1992; Beckley, 2003; Hay, 1988), *community attachment* (Hummon, 1992; Kisko *et al.*, 1994), *sense of community* (various authors in Fisher *et al.*, 2002; Horne, 2004), and *community satisfaction* (Buttimer, 1980b; Fried, 1986), have all been identified and studied separately. Each are investigated briefly below.

Experience of Place

Experience of place can range from passive to visceral (Tuan, 1975), from conscious to unconscious (Hiss, 1990). It can occur at scales from micro to macro, though at the macro scale, such as that of the nation, experience of place tends to be indirect (Tuan, 1975). Indirect experience of place is expedited by telecommunications technology, though it is an experience that is interpreted for us through media (Riley, 1992). Hence, the values people associate with place become less abstract or stereotypical the more physical experiences that they have there (Brandenburg and Carroll, 1995).

Sense of Place

It is generally given that time in, and familiarity with, a place is a necessary (Hay, 1988; 1998), though insufficient condition to gain a sense of place (Tuan,1975). Sense of place is gained by personally knowing a place and its workings (Stewart *et al.*, 2004). Intensity of sense of place can be affected by the range of that knowledge. Hay (1998) found that those who spent most of their time in their homes and surrounding environs (as opposed to simply the home) were more likely to report a greater intensity of sense of place. Research with youth shows similar results. Rural youth were more likely to identify places such as garden, house, farm as 'their own' than were urban youth, as rural youth were involved in work in those areas (Lynch, 1977).

Meanings assigned to place may arise from social, aesthetic or ecological perspectives, leading to potential for conflict over use of place (Gloor and Meier, 2000). The ecological perspective of a river revitalization was subordinate to that of social and aesthetic perspectives (Gloor and Meier, 2000), underlining the importance of place change that aligns with positive social outcomes, be they community identity (Stewart *et al.*, 2004), personal identity (Brandenburg and Carroll, 1995) or social interaction (Gloor and Meier, 2000). Clearly social factors are important to sense of place. Hay (1998), too, found social factors overriding ecological factors in development of sense of place in that sense of place was both positively correlated with social belonging and that quality of community was of greater importance than size in developing sense of place. Like experience, sense of place may not be fully conscious and articulated. However, once relationship with that place is threatened (Buttimer, 1980a; Hay, 1998; Hiss, 1990) or a place is left (Hay, 1988), a sense of place may become evident.

Argument has been made that the modern lifestyle with its high mobility, mass communication and individualistic focus has negatively impacted sense of place, removing from people a sense of belonging (Hay, 1992). Such individualism and isolation also reduces opportunities to develop a collective sense of space (Buttimer, 1980a).

Attachment to Place

Simply remembering, naming or owning a place are not sufficient conditions for place attachment (Rubenstein and Parmalee, 1992). However, *pride* in ownership does increase attachment (Beckley, 2003). Place attachment involves many elements including affective, cognitive and behavioural (Buttimer, 1980a). While attachment solely to a specific geographical place may occur, it is also true that social relations may mediate an attachment to place (Altman and Low, 1992; Marcus, 1992). Hummon (1992) claims that social attachments are the most significant ties to place. Attachment also involves time in place to develop emotional and/or symbolic connections (Hillier, 2002; Hummon, 1990). Place becomes a symbol, a medium for an experience and/or a memory of that experience (Marcus, 1992; Riley, 1992; Tuan, 1974). For the elderly, place attachment is as much about past memories in a place, as it is about the current nature of the place (Rowles, 1980). Thus place serves as "a medium or milieu which embeds and is a repository of a variety of life experiences, is central to those experiences, and is inseparable from them" (Altman and Low, 1992). Low (1992) has identified six types of place attachment:

> "(1) genealogical linkage to the land through history or family lineage; (2) linkage through loss of land or destruction of community; (3) economic linkage to land through ownership, inheritance and politics; (4) cosmological linkage through religious, spiritual or mythological relationship; (5) linkage through both religious and secular pilgrimage and celebratory, cultural events; and (6) narrative linkage through storytelling and place naming" (p.166)

Economic and historical attachments may be either magnets (positive) or anchors (negative or neutral) (Beckley, 2003). While place has been found to contribute to identity, youth differentiate between identity – belonging or being from a place – and attachment – the anchor of being held by age and family in a place but not necessarily liking it (Laurent, 2001 cited in Pretty, 2002). Those with magnetic attachment to place view it in a positive light while negatives are downplayed and comparisons are made with other places to highlight the good (Hay, 1988; Hummon, 1990).

The importance of time to attachment was demonstrated in Hay's (1998) study in which outmigrants' attachment to place declined over time, especially if there was no family or land connection remaining in the emigrant community. This was more true of non-native emigrants: Maori outmigrants tended to retain their attachment to place (Hay, 1998).

Community Satisfaction

Community studies are not solely about social elements; there are physical components of place involved, too. The physical environment of a community or neighborhood is one of two important factors contributing to community satisfaction (Herting and Guest, 1985 cited in Hummon, 1992). The form – urban or rural – and population density of a community affects satisfaction with it (Hummon, 1990).

Social factors stand out as being as important in community satisfaction as physical factors (Herting and Guest, 1985 cited in Hummon, 1992). Buttimer (1980b) noted that the most significant variable associated with community satisfaction was a sense of belonging, feeling 'at home.' Elements contributing to that feeling included a positive social environment. Tuan (1974) also notes that satisfaction has more to do with being satisfied with neighbors than with the physical environment. Looking at metropolitan neighborhoods, Fried (1986) notes that generally Western people are very satisfied with their neighborhoods *but* that such expressions of satisfaction do not equate with what is desired of a neighborhood, particularly with regard to the social experience of neighborhood. Relating satisfaction with social elements also involves social capital. People in communities with a high degree of community social capital, or civic structure, were more likely to perceive that their town had high quality secondary services (Morton, 2003).

Sense of Community

Sense of community is maintained through economic, recreational and service activities, including such mundane tasks as picking up mail or buying groceries (Liepins, 2000). Consequently, loss of social gathering points affects sense of community (Hay, 1998). Sense of community may be affected by a loss of key people, changes in population and changes in communications technology (Hay, 1998).

Temporal issues also come into play with longer residence increasing sense of community (Goudy, 1990). There is mixed evidence concerning the effect of socio-economic standing and sense of community. Higher social standing and increased age were found to contribute to a higher sense of community (Goudy, 1990) yet Hillier (2002) suggests that there is a greater sense of community in areas of low socio-economic status with those more well-off being inclined to be involved in communities of interest rather than those of location.

As with sense of place, sense of community may develop when residential amenity value is threatened. This kind of sense of community is tenuous as it is reactionary and based on fear (Hillier, 2002).

Attachment to community

Similar to community satisfaction, attachment frequently involves social relationships. However satisfaction does not necessarily lead to attachment (Tuan, 1974) nor attachment to satisfaction. Expressions of criticism may not always be an indication of low attachment to a community but rather the opposite, demonstrating a level of caring for that community (Perkins and Long, 2002, p. 298).

Community attachment is most affected by social bonding with greater social relationships leading to greater attachment and inhibiting outmigration (Goudy, 1990; Kisko *et al.*, 1994). Perkins and Long (2002) found that participation in the community leads to greater attachment: people unwilling to invest time or money in their community were most likely to leave. Yet Kisko *et al.* (1994) conclude that rather than being indicative of attachment, involvement in a community is more utilitarian in nature as it ensures needs are met while residing in the community, such that involvement may be more linked to satisfaction than to attachment.

Findings on the effect of a community's population size and density are as conflictual as participation. Goudy (1990) found that neither had significant negative affect on community attachment while Lewicka (2005) found that the size of the town/city had a negative linear effect on both place attachment and neighborhood ties. Hummon (1990) found that, unlike satisfaction, attachment was not related to the form – rural or urban – of community.

Time of residence is also important to community attachment, though is insufficient to fully explain it. Length of residence has been demonstrated to increase friendships and therefore attachment but time does not influence formal ties, such as those to a church, which have been shown to have an independent and positive influence on attachment (Liu *et al.*, 1998). In a post-mine closure survey of Ontario mining town residents, those who had lived there prior to its opening were less negative about the long term prospects for the town; were more likely to point out positive aspects about the town; and were more likely to indicate their intention to remain in spite of the economic setback (Johnston *et al.*, 2004). Conversely, newcomers to a community have been found to have a greater level of community attachment than oldtimers (McCool and Martin, 1994 cited in Beckley, 2003). Where long term residents are seniors, their different life requirements than relative newcomers may be such that attachment is more defined by the satisfaction of needs than time in residence, *per se*. Newcomers' attachment to community could be more to biophysical features rather than to social relationships (McCool and Martin, 1994 cited in Beckley, 2003; Brehm, 2007) as length of residence has been found to be unrelated to community attachment in high amenity areas (Brehm, 2007). Attachment research in high amenity areas – those with lakes, mountains, wildlife, beautiful scenery – has demonstrated that there is direct attachment to biophysical features (Ambard, 2004; Brehm, 2007). However, it is interesting to note that attachment to the natural is integrated with social attachment, particularly in terms of lifestyle (Brehm, 2007).

Encompassing the concepts

While there is validity in investigating each concept separately, there is also reason to consider them as an integrated whole precisely because "both a sensing element, affected by perceptual, spatial, and structural constraints, and a bonding element, involving emotions, motives, insider traits, and taken-for-grantedness, come together to form a sense of place" (Hay, 1988). Furthermore, as the above review reveals, there is a lack of consensus regarding which indicators belong with which concept, suggesting that investigating the concepts of place and community as an integrated whole may be more effective. Other researchers point to the relationships between the concepts (Perkins and Long, 2002), viewing sense of place as a multi-dimensional construct including aspects of community attachment, satisfaction and identity (Hummon, 1992). As the rural community under study is a placed based locale, where this paper refers to 'sense of place,' it is subsuming all of the above concepts.

Implications for sustainability

Experience of place develops values of that place. The more valued a place, the more likely effort will be taken to sustain it. With social aspects being so strong in sense of place, spaces in a community need to be developed and maintained for social interactions to occur. Furthermore, the importance of the environment in which those interactions occur needs to gain a greater degree of primacy. Thus complete community sustainability "focuses on the primacy and quality of relationships among the people sharing a particular place and between the people and their environment, particularly their immediate environment"

(Maser, 1997, p. xv). In terms of attachments, it is desirable to achieve a greater degree of magnetic attachment rather than merely anchored attachment.

Social Capital

Social capital is tied to sense of place and attachment to community. With social relations frequently cited as a critical component of sense of community, social capital is naturally tied to the concept. Casual contact between people is the basis for social capital:

> The sum of such casual, public contact at the local level – most of it fortuitous, most of it associated with errands, all of it metred by the person concerned and not thrust upon him by anyone – is a feeling for the public identity of people, a web of public respect and trust, and a resource in time of personal or neighbourhood need (Jacobs, 1961 cited in Macgilliveray and Walker, 2000, p. 198).

Social capital is a term that has entered the literature within the last quarter century, though its conceptual components are by no means new to sociology. Coleman, Bourdieu and Putnam are generally considered the principal originators of the concept of social capital (Field, 2003). While there is some overlap in each of their conceptualizations, there are also marked differences. For Bourdieu, social capital is, like cultural capital, a means of explaining the maintenance of class divisions (Field, 2003). Further, social capital is possessed by the individuals to whom network connections belong: "The volume of the social capital possessed by a given agent thus depends on the size of the network of connections he can effectively mobilize on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected" (Bourdieu, 1986: 249). Bourdieu's focus on the individual highlights the instrumental nature of social capital (Portes, 1998).

Coleman similarly sees social capital in terms of individuals as it is primary in terms of its contribution to the development of human capital. While he emphasizes the importance of relationships between parents and children, he acknowledges the importance of wider networks:

> The social capital that has value for a young person's development does not reside solely within the family. It can be found outside as well in the community consisting of the social relationships that exist among parents, in the closure exhibited by this structure of relations, and in the parents relations with the institutions of the community (Coleman, 1988: 31).

It is the degree of closure in networks that makes social capital functional, as without closure there can be no sanction upon those who fail to abide by the norm of reciprocity (Coleman, 1988). The emphasis on closure suggests that Coleman values a bonding type of social capital over bridging and linking types.

Bonding and bridging social capital correspond to strong and weak ties of network theory described by Granovetter (1983). Linking social capital "reaches out to unlike people in dissimilar situations, such as those who are entirely outside the community, thus enabling members to leverage a far wider range of resources than are available within the community" (Woolcock in Field, 2003: 42). Both linking and bridging types of social capital ensure coordination and efficiency by increasing accessibility to resources (Adam and Rončević, 2003). However the relationship between types of social capital and access to resources is not straightforward. Onyx and Leonard (2001) found that strong ties were most often used for connections both in bonding, in-group situations and bridging across networks. Only professional status allowed for the use of loose ties for bridging (Onyx and Leonard, 2001).

Investment in social capital is very similar to a strong sense of place: longer residence in place and owning a home in that place increases both sense of place and investment in social capital (Glaeser, 2001). Changes in population mobility and communication technology have changed the sources of social capital with family becoming less important than friends and the internet being used as a medium of connection between people (Field, 2003). Because bonding is important in achieving ends, and because the establishment of bonds takes time, high population turnover would be expected to inhibit the development of bonding and hence social capital. However significant factors that influence investment in social capital are: if an individual is employed in a social occupation, an individual's education level, and community homogeneity (Glaeser, 2001), all of which would suggest that population migration does not have to limit the development of social capital. However, Parkins (1999) found that well-educated, employed, young families were those most likely to move. Thus while education and occupation may influence investment in social capital, it may be of insufficient quality for times of great strain in the community.

Strengths of Social Capital

One of the strengths of the concept is that it seems to be applicable at multiple levels. Social capital functions as family support, social control, and provides resources through networks (Coleman, 1988; Portes, 1998). The latter two functions are the ones which are also taken to be of use at a collective level. Putnam, while accepting the individual aspect of social capital, focuses on the concept as a property of the collective. As a private good, social capital has externalities such that "not all the costs and benefits of social connections accrue to the person making the contact" (Putnam, 2000: 20). Therefore the private good of social capital may take on the characteristics of a public good. He gives the example of living in a neighbourhood in which people look out for one another's homes thereby reducing the crime rate[7]. Everyone in the neighborhood benefits from neighbourly watchfulness, even if not really a member of that neighbourhood network.

A further function of social capital is in disseminating knowledge (Adam and Rončević, 2003; Dale, 2005), a point well demonstrated in the adoption of new agricultural practices where farmers are more likely to adopt or follow advice of those they know and trust (Alberta Research Council, 2006; Mathijs, 2003). Social capital reintroduces the concept of human relationships to policy and economy and it "is the quality of relationships in any given social unit [that] will determine its sustainability" (Schuller, 2001, p. 95).

Weaknesses of Social Capital

However, there are pitfalls in social capital theory. Portes (1998) points out the necessity of ensuring that one does not confuse social capital with the resources an individual acquires from it. When applying social capital to the community level, he further points to circular arguments: "As a property of communities and nations rather than of individuals, social capital is simultaneously a cause and an effect. It leads to positive outcomes, such as economic development and less crime, and its existence is inferred from the same outcomes" (1998: 19). Furthermore, "collective social capital . . . cannot simply be the sum of individual social capital. If social capital is a resource available through social networks, the resources that some individuals claim come at the expense of others" (Portes and Landolt, 1996). Even if individual social capital can be aggregated to network level, the question is whether that capital at the network level can be aggregated to the whole community (Bridger and Luloff, 2001) Types of social capital are not fully fungible and where there are groups working in one of the aspects of sustainability, it isn't clear that their social capital could be accessed for work in another aspect of sustainability, as they may be seen as contrary (Bridger and Luloff, 2001).

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[7] This is empirically supported by an estate study (Macgilliveray and Walker, 2000) in which getting to know one another and participation in making the environment better ensured people looked out for each other and crime rates dropped.

Social capital is generally taken as a positive thing, though groups with strong bonding social capital such as gangs, can be a negative for society (Field, 2003; Portes, 1998). Other negative consequences include "the exclusion of outsiders, excess claims on group members, restrictions on individual freedom, and downward levelling norms" (Portes, 1998, p. 15). Bonding can end up being limiting as it promotes exclusivity (Etzioni,2000). This is demonstrated by the difficulties new people can have 'breaking in' to a small community, perhaps due to the fact that rural communities have more bonding social capital while urban communities are characterized by more bridging social capital (Onyx and Bullen, 2000). However, even where social capital isn't producing obvious negative social externalities, it isn't necessarily as beneficial as may be portrayed. The quality and quantity of resources that can be brought to bear is influential in whether social capital is of any great use (Portes and Landolt, 1996).

A final problem with social capital lies not so much with the concept, as with its use. By promoting and supporting rural identity and community capacity, governments aim to regain legitimacy lost with their withdrawal of services and downloading of responsibilities to the local level (Whittaker and Banwell, 2002). In the health and social care sector this has meant that where the voluntary sector has stepped in to cover retreating government services, it has legitimized further retreat (Whittaker and Banwell, 2002). National level assumptions are that those at the local level are able to take on responsibilities for caring for aging residents in spite of actual capacity to do so (Skinner and Joseph, 2007). Furthermore, whilst downloading responsibility for services to local non-profit organizations, the government at the same time has cut funding to those organizations, resulting in heightened pressure to increase reliance on volunteer labour (Chouinard and Crooks, 2008). Thus we must consider social capital in a broader institutional context with a focus not merely on individuals but on relational patterns at and between all levels (Onyx, 2005; Schuller *et al.*, 2000; Woolcock, 2001).

Usefulness of the concept in study of community sustainability

Onyx (1996) identifies six key dimensions of social capital: (1) valuing self and others; (2) trust; (3) multiplex relationships; (4) connections; (5) reciprocity; and (6) empowerment as an outcome. These dimensions tie into elements necessary for sustainable community to occur. The first element necessary for community is social relationships which define socialization and provide social control (Maser, 1997, Wilkinson, 1991). The first three dimensions provide this element of community. The second element is facilities and social services that supplement social relationships in times of need (Maser, 1997, Wilkinson, 1991). The fourth dimension aids in this element as connections to higher levels of government and other communities can facilitate establishment of, and access to, social services. The third element is economic opportunities for production and consumption (Maser, 1997, Wilkinson, 1991). For these opportunities to occur in smaller communities there needs to be relationship of commitment between business and consumer such that all six dimensions of social capital tie into economic development. Fourthly, inequality needs to be reduced in order that the social relationships formed in a community are not exclusive (Wilkinson, 1991). This is where bonding social capital must be as broad as possible and it is through valuing and trusting others, and developing relationships in multiple contexts which result in reciprocity that exclusion on the basis of status can be reduced.

Social capital functions to ensure norms are observed, as a source of family support and to obtain benefits through networks (Coleman, 1988; Portes, 1998). The question arises how these functions can be of benefit to developing sustainable communities. The most difficult issue in community sustainability is the initial establishment of norms which would contribute to the community's sustainability, though once established social capital will be of use ensuring such norms are followed. The second function is of not a collective one, and in as mobile a population as ours, friends have become a greater source of social capital than family (Field, 2003). The last function is the most commonly attributed to social capital (Portes, 1998), and may be most likely where sustainable communities can make use of it. Bridging and linking social capital can connect communities and networks, and may allow the resources of one to contribute to others, keeping in mind that strong ties are important in this process. However, for sustainable development to occur, cooperation must occur at all levels (Dale, 2005), hence all types of social capital will be necessary.

As one of the uses of social capital is in effective access of resources and cooperation between and among networks in order to achieve common goals (Field, 2003), one might think that a community in which there is high associational membership would be one which exhibits high social capital.

However, simple group membership is an insufficient condition for community level benefits to be displayed (Morton, 2003; Stolle and Rochon, 1998). While people who belong to associations score higher on indicators of social capital than those who do not, some types of associations contribute more to social capital than others (Stolle and Rochon, 1998). Cultural organizations were found to have members very high in social capital indicators, social and leisure organizations much less so (Stolle and Rochon, 1998). Culture seems to be a key aspect to generating social capital as Jeanotte (2003) found that people who participated in any kind of cultural activity had a voluntarism rate 14 percent higher than those who engage in no cultural activities. None-the-less, the voluntary sector, including churches, service organizations and social clubs has taken up the slack in many communities as changing government priorities has resulted in a reduction of services, particularly in terms of health and social care. Thus the social capital present in the voluntary sector can, in some instances, be utilized as a demonstration of agency, "countermanding the imperative to move to better-serviced communities" (Skinner and Joseph, 2007, p. 125). It is exactly this kind of action that contributes to community sustainability.

Social capital may not be served by mere associational membership but where membership in a variety of associations is high, that can contribute to the connections and multiplex relationships identified as a key dimensions of social capital (Onyx, 1996). Such memberships also contribute to feelings of belonging that increase sense of place.

Sustainable agriculture could contribute to community sustainability, in part through increased social capital. Flora's (1995) study of sustainable and conventional agriculture towns shows that "movement toward sustainable agriculture through local sustainable farming organizations in a community is associated with, although not necessarily a determinant of, an increase in a community's social capital" (p. 244). As the quality and quantity of interactions that build social capital varies (Falk and Kirkpatrick, 2000), so too would the contribution of local sustainable farming organizations to social capital.

The greater significance of moving toward sustainable agriculture is that individuals, and communities, realize their agency and rather than act as victims of greater structural influences, take decisions that are within their power to take (Flora, 1995). Thus, particularly for single resource-dependent communities, social relationships may be sufficient to empower the development of new enterprises when the community's resource becomes non-viable (Black and Hughes, 2005). Hughes, Jr. (1987) points out that empowerment of this kind best occurs through strengthening social networks and institutions.

The amorphous nature of social capital necessitates that it not be looked upon as a causal variable but rather involved in a complex relational web of variables (Adam and Rončević, 2003). Various combinations of types of social capital produces diverse outcomes, thus the action of social capital is multidimensional and dynamic, unique in each situation (Woolcock, 2001). Perhaps if the object is to study social capital in isolation, sources and combinations of social capital are more important than outcomes (Field, 2003; Portes, 1998; Woolcock, 2001). If, however, the issue at hand is achieving community sustainability, "the value of social capital to community renewal rests not in its presence but in the way in which it is mobilized to coordinate action – both within a community and between the community and the broader society – to achieve developmental objectives (Barraket, 2005, p. 75)." Thus social capital may be viewed as potential energy, available to do the work of sustainable community development. However, as with energy, quality matters. The quality of the resources upon which any particular pool of social capital may draw will determine the level of potential and therefore the amount and kind of work that can be achieved.

Chapter Three

RESEARCH QUESTIONS

Though there has been extensive research on sustainability, sense of place and social capital, there are lacunae in qualitative investigations of how a community's citizens conceptualize community sustainability and if sense of place and/or social capital enter into these conceptions. Further it is necessary to establish if community members conceptualize sustainability in a manner that reflects the economic expansionist worldview and therefore supports the status quo or if conceptualizations are more counter-hegemonic, challenging root causes of unsustainability. Due to the fact that this study undertook to investigate rural community sustainability from the vantage point of a rural community's citizens, it is qualitative in nature. Furthermore, by utilizing a visual sociology method of participant-photo elicitation interviews, the questions explored in the research would best be considered guidelines rather than hard targets.

Guiding Questions

The following are the questions that guided the research:

1. How do individuals visualize sustainability in their community?
2. How are individuals' conceptions of sustainability expressed? i.e. are they more or less reflective of economic expansionist hegemony? Are there 'privileged' knowledges? Do issues of power, control and agency enter into conceptualizations of community sustainability?

3. Does sense of place emerge as a component of community sustainability? If so, how is it expressed as playing into community sustainability?
4. Does social capital emerge as a component of community sustainability? If so, how is it expressed as playing into community sustainability?

Expectations

With regard to the above questions, my expectations were as follows:

1. Individuals will visualize sustainability as encompassing one or more of the dimensions of sustainability, though will not put equal emphasis on each dimension.
2. Visualizations of sustainability will reflect the hegemony of economic expansionism to varying degrees. As such, individuals will express their agency – and knowledge – in a manner that conforms to the degree of hegemony they express. Power and control will be expressed as variables external to the community.
3. Sense of place will be stronger in country residents than town residents. Sense of place for country residents will encompass the landscape more so than for town residents. Social relationships will figure strongly in sense of place. Those with strong sense of place will be committed to remaining in the community and more sensitive to issues of sustainability.
4. Potential for collective social capital will be evident in membership to churches and associations, and through informal relationships. Collective achievements will be put forward as indicators of community sustainability.

Visualizations of Community Sustainability

Roles, age and place of residence – town or country – are expected to impact visualizations of community sustainability. Country residents, due to their proximity to the landscape, modified as it may be, are expected to emphasize environmental sustainability more than town residents. All citizens are expected to emphasize issues of economic sustainability. However, those with a conception of sustainability conforming to the hegemony of economic expansionism are expected to put priority on the economy, and express conceptualizations of community sustainability that conform to the status quo, i.e. conventional community development.. Non-conventional farmers are expected to display the most counter-hegemonic view of community sustainability, though all involved in agriculture are expected to express a view that the current economic situation is unsustainable for farmers.

As Foucault suggests, the most relevant question for research is "how do things happen" (1980 [1975], p. 50), supporting investigating the mechanisms of power. In looking at developing sustainable communities, we must look at knowledge and mechanisms of power if we wish to influence how sustainability is to happen. Because power and knowledge (truth) are articulated such that "the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power" (Foucault, 1980 [1975], p. 52), I expect that expressions of knowledge will reflect the degree to which the individual conforms to the hegemony of economic expansionism. Further, as knowledge supportive of that hegemony will be generally a privileged knowledge, expressions of other, subjugated knowledges will be in a manner that acknowledges them as such.

Sense of Place

Located in the Aspen Parkland, an eco-region heavily modified for agriculture and oil and gas, it is expected that the physical landscape will be less important in sense of place than social relationships. The bio-physical setting of the community would not be considered high amenity and therefore less involved in attachment. A commitment to the community through a strong sense of place will translate into identifying more positive aspects of community sustainability, while those with a lesser sense of place will highlight the blocks to sustainability.

I expected agricultural people to have greater attachment to physical aspects of place due to their work on the land. Those people with multi-generational connections to the community are expected to demonstrate a stronger sense of place than those without. As length of residence has been identified as a variable important in generating sense of place (Tuan, 1975), attachment to place (Hay, 1998), sense of community (Goudy, 1990) and attachment to community (Johnston *et al.*, 2004), it is expected that the longer term residents will express greater sense of place.

Given that this is a qualitative study, rather than a quantitative one, claims assessing whether one participant has a greater or lesser sense of place than another are subject to interpretation on my part. Such assessments are based on the following: whether a young person expresses a willingness to return to the community; if an adult participant would choose to live in Viking, assuming that their were no economic anchors; if adult participants would like their offspring to live in the community; and whether a participant was someone who left but returned, suggesting that Viking was more appealing than living elsewhere.

Social Capital

The social capital dimensions of trust and multiplex relationships will be present as small communities have been found to have greater knowledge and trust of neighbours than urban communities (Black and Hughes, 2005; Turcotte, 2005). Associational membership is expected to be high with achievements occurring through voluntary effort as, compared with urban centres, small towns have higher levels of participation in voluntary organizations (Black and Hughes, 2005; Turcotte, 2005). I expect that examples of the results of social capital in action, that is community projects, will be raised as examples of sustainability.

With sense of place expected to be centred on social relationships, it is expected that there will, consequently, be strong social capital. However, as bonding capital tends to be strong in small communities (Onyx and Bullen, 2000), I am expecting that exclusivity may be raised as a barrier by newcomers to Viking.

Chapter Four

METHODOLOGY AND DATA ANALYSIS

The objectives of this research project were to explore the topic of community sustainability from the point of view of community members in order to reveal what informs the concept and the dimensions included in its definition. A further objective was to utilize a qualitative visual methodology that encourages depth and breadth of response and exposes significant symbols for respondents.

Research Approach

When approaching a research project, one may consider using a quantitative method, which tends to be positivist, deductive and objectivist, or a qualitative method which tends to be inductive, interpretivist and contructivist (Bryman and Teevan, 2005). While a quantitative method can be advantageous for some avenues of study in the social sciences, I chose, for the reasons detailed below, to follow a qualitative approach. While my literature review revealed studies on perceptions of sustainability, levels of social capital, and sense of place, with the exception of sense of place studies, studies on the topics of social capital and individual perceptions of sustainability were exclusively quantitative. Though these quantitative studies are useful, both in forming some initial questions and for the sake of analytical comparison, I was hesitant to use that method. While there is advantage to quantitative study in that it allows for statistical analysis of testable hypotheses, there is weakness as well. The most notable weakness of utilizing quantitative study for community sustainability is, in my point of view, that by developing Likert scale questions, the researcher imposes her definition of sustainability on the respondents. As I wished to avoid gathering data that would tell me to what degree participants agreed with my assumptions about community sustainability, I chose to engage in a qualitative study. The choice of qualitative method does not eliminate the influence of my assumptions on the research as I still determined the line of questioning in the interview. However, it was my intent that this method would allow space for my assumptions to be dismissed, or, at very least, modified.

The concepts involved in this study included 'community,' 'sustainability,' 'sense of place,' and 'social capital,' all of which are very ambiguous and open to a variety of interpretations. A qualitative semi-structured interview method was the most appropriate for exploring the breadth of interpretations. The free-flowing nature of qualitative interviewing was also key to allowing for analysis of how power, knowledge and hegemony were expressed by participants. While it would be possible for one to ascertain whether or not conceptualizations of community sustainability were more or less reflective of economic expansionist hegemony utilizing a quantitative instrument, I opine it to be preferable to obtain each individual's expression for the most profound analysis of power and hegemony.

Finally, aside from the issues of obtaining data that accesses the variety and breadth of the concepts involved, there is the question of engaging the participant. The more engaged and interested the participant is in the project, the more likely one is to obtain 'good' data, meaning responses that are thought-out. With the incredible demands on people's time and the number of questionnaires with which one is assaulted via phone, mail, email and internet, I firmly believe that such a quantitative approach would have been poorly received, in terms of a low response rate. Furthermore for those who might respond, their responses would not be as well reflected upon as they could be simply because surveys have a tendency to be boring. The photo-elicitation method engaged participants from the start. They had a vested interest in the project through the production of images of community sustainability. A personal discussion of those photos and the issues around them and the community is far more gratifying than providing a scaled response to a statement. The opportunity to engage in real, human interaction is extremely important. Two examples from different interviews reflect the value of the method. One focuses on the process itself, "I want this to be fun," a male participant stated as we spread his photos over the table at the start of an interview. The second example is in terms of interacting with the researcher, the subject under study and reflecting on the process. Concluding the discussion of the sustainability of agriculture generally, and the consequences for community, specifically, a male participant commented, "It's not just that there's a simple issue, like you bit off a big chunk of apple. The direction that you want to go is endless. If you wanted to just spin in a circle, you could. That's quite a thing to go for a Master's in that. Like you're asking some pretty heavy questions, broad questions."

Research Design

The strategy employed in this project was a case study. With an investigation of citizens' conceptualizations of community sustainability, the case study was instrumental inasmuch as the interest is on the issue to which the case is secondary (Stake, 1994). While the case study site was chosen to be emblematic, in terms of being typical (Gobo, 2004) of a struggling rural community in the Aspen Parkland ecoregion of Alberta, it is recognized that findings will be limited in their generalizability to communities experiencing similar conditions (Strauss and Corbin in Gobo, 2004). Even where economic conditions are similar, the factors of social capital and sense of place will potentially vary from community to community. Thus, if those factors *are* influential in establishing visions of sustainability, the generalizability of findings will be further limited. However, by providing rich descriptions, others will be able to judge the degree to which the findings of this research may be applied to other situations.

This research project utilized a qualitative method from visual sociology, that of photo-elicitation interviews in which face-to-face interviews were conducted based upon photos taken by participants. Participants were given a disposable camera and were instructed to take a minimum of 12 photos but permitted to take up to 26 photos (a full disposable camera). Photo instructions encouraged participants to take photos that represented both positive and negative aspects (as per Gloor, 2000; Schratz and Steiner-Löffler, 1998) of sustainability in the community. The cameras were mailed back to me in postage paid envelopes which I provided each participant. Once the photos were developed, each participant was contacted to set up a time for a face-to-face interview. If a participant had taken more than 12 photos they were asked to select 12 for discussion.[8] The interview was semi-structured, proceeding initially with the photographs guiding the direction and focus of the discussion. For two interviews that were not based on photos, I started with the questions which formed the photo instructions, i.e. what is sustainable about the community of Viking? What is unsustainable? All interviews were digitally recorded and transcribed. Transcriptions did not include elements for conversation analysis; pauses, hesitation sounds – uh, ah, um – and frequent 'likes' and 'you knows' were excluded.

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[8] Twelve is the number of photos used in photo-elicitation projects by Ambard, 2004; Beilin, 2005; Radley and Taylor, 2003.

Instrument

I, like most qualitative researchers, am interested in seeing through the eyes of the participants. It was important in gaining the insights of the participants to conduct face-to-face interviews as "face-to-face interaction is the fullest condition of participating in the mind of another human being" (Lofland and Lofland, 1995 cited in Bryman and Teevan, 2005, p. 154). As part of seeing through the eyes of the participants, I utilized a method from visual sociology. Participants' photographs were to be of elements that either contributed to community sustainability or were challenges to community sustainability. As some things could be difficult to photograph directly, participants were invited to be creative. Such a photo-elicitation interview method has been employed in studies as diverse as those of mobile workers and collective offices (Felstead *et al.*, 2004); of patients investigating the aspects of the hospital ward that influence recovery (Radley and Taylor, 2003); and of people's reaction to a river's revitalization (Gloor, 2000). In research with young people, it has also been effectively used with children evaluating their school (Schratz & Steiner-Löffler,1998); in student's evaluation of classroom writing (Cappello, 2005); and in studies of inner-city childhood (Clark-Ibáñez, 2004). While photographs have not been used directly in studies of sustainability, there is support for use of the visual in 'seeing sustainability' through the process of bioregional mapping. This participatory exercise involves building a visual representation of the ecological, economic and human – built environment, land use, etc. – activities in a region. Practitioners highlight that the importance of the exercise is that it allows people to see their locality holistically (Aberley, 1993).

The strength of participant photography over researcher photography is that by giving participants the capacity to photograph the subject of research themselves, one avoids the tendency to see and photograph the subject through one's own academic cultural lens (Harper, 1998), a risk similar to generating Likert scale questions: I would be producing my own view of sustainability and asking others to interpret it.

There are several reasons to utilize photo-elicitation interviews. First, it deepens participants' engagement with the research process. The act of photography is a momentary, deliberate objectification of the world (Radley and Taylor, 2003). The act of reflecting upon what and how one is going to portray sustainability should contribute to a more revealing interview as respondents will have had a chance to dwell on the subject ahead of time. Ambard (2004) felt that this prior reflection, due to the act of photography, led to more thoughtful responses in the interview. I also feel this was the case. In asking people to discuss as broad and complex a topic as community sustainability, the necessity of having to photograph elements of sustainability engaged their thoughts ahead of time and, I believe, resulted in a richer interview results. None-the-less, photography was not strictly necessary as I had two stimulating interviews with participants who declined to take photos but whose views I considered important. They were in positions to have dwelt upon the subject previously, which came through in their responses. However, facilitating the interview was more difficult without the 'guide' of the photographs.

The choices that participants had to make both in terms of what was photographed and which photographs were most important to discuss were influenced by "identities and intentions . . . [and their] relationship with the subject" (Collier, 2001). The influence of the participants' identity, intentions and relationship to the subject were, in some cases, more evident because of the necessity to reflect upon that which was most important to them. Further those implicit influences became explicit through the interview process. Here was where issues surrounding knowledge, power and hegemony – counterhegemony took shape. For example photos of the Cargill inland terminal were representative of global trade and of issues of power, of loss of community wealth, of the "evil" of transnational corporations. Conversely, a photo of the same terminal was portrayed as a positive contribution to the business environment of the community. The symbols chosen for inclusion in the interview told a story about the participant's relationship with the subject in the photo and the subject of community sustainability.

Second, the utilization of photography allows the researcher to take a more passive role in the interview process, focusing more on listening, with questions serving only to probe issues raised by respondents (Collier and Collier, 1986; Friedenberg, 1998). The photograph becomes a "medium of communication" (Clark-Ibáñez, 2004: 1512) with respondents focusing more on the photo than the interviewer (Schwartz, 1989). The photos guide the interview but the discussion is not limited to that contained within the frame of the photo. The interview is able to verbally expand both the scene and its underlying meaning (Beilin, 2005; Gloor and Meier, 2000). Furthermore, the photographer may state a deliberate framing of a photograph to tell a particular story (Beilin, 2005): an interview puts the photo in context and allows elucidation as to *why* the participant would wish to tell that particular story. Yet though the discussion may go beyond the frame of the photo, it remains grounded in the research subject as the photo remains the reference point (Collier and Collier, 1986). While I had an interview guide of topics to cover beyond the photographs, in the event that those issues weren't raised through the photography, the photographs remained the anchor point for most of the interview. My interview guide included questions of if and where the topic of sustainability is discussed; if the respondent felt they had a role in achieving their vision of sustainability; length of time in the community; why live there (or would it be a community of choice as an adult, if a young person were the respondent); what was good about the community; roles in the community; and participation in formal associations (see Appendix A for full interview guide).

A third benefit of photo-elicitation interviews is that photos provide a projective opportunity (Collier and Collier, 1986; Friedenberg, 1998) in that that they may encourage the participant to verbalize about their environment or their expert knowledge. Further, projection is useful as, even if a subject is difficult or impossible to photo (van der Does *et al*, 1992) or forbidden to be photographed (Radley and Taylor, 2003), it will still appear in the interview. Indeed I found that frequently even the photos that had been excluded from the 12 for discussion still found their way into the interview.

The power of photos to stimulate memory (Collier and Collier, 1986; Harper, 2001; van der Does *et al*., 1992), feelings and thoughts (Collier, 2001) beyond the mere content of the image is one thing that makes photo-elicitation a powerful interview technique. In some cases it was the inability to take a photo due to the disappearance of what would have been photographed, that stimulated those memories and thoughts regarding community sustainability.

A fourth reason to use photo-elicitation interviews, is that they engender a sense of collaboration between researcher and participant (Pink, 2001; van der Does *et al.*, 1992). The idea of collaboration continues into the interview process. The knowledge produced through the interview is co-produced by both researcher and participant (Rapley, 2004). By acknowledging that co-production, one can ignore the exhortation to avoid leading questions (for example, Lofland and Lofland, 1995, p. 86). The importance is not to take the words of an interview out of the context of their production, both local and general historico-socio-cultural (Rapley, 2004).

Interviews were held mostly in participants homes, though other venues included places of work. Length of interviews ranged from 35 minutes to over two hours. Youth were the most difficult to interview (and young men, the most difficult of the youth). Their answers tended to be brief and very concrete. It was challenging to find issues to probe. With the exception of two adult interviews that were time crunched due to other commitments, youth interviews were the shortest. The longest interviews were with seniors, and farmers. Also those with a higher level of education tended to elaborate to a greater degree than others.

I found that being a farmer, and growing up in a rural community gave me an 'in' with my participants. The feeling of rapport with participants often led to sharing personal experiences with participants which, while not always 'on topic', contributed to an open and comfortable interview.

Data Collection

Interviews began in April 2007 and ended in August 2007. A total of 25 interviews were conducted with 27 individuals. Twenty three photo sets were taken: two participants expressed an interest in being interviewed though didn't wish to take photos. As, in the main part, the photography exercise was to engage people on the topic ahead of the interview, and as these two participants were people for whom the topic of community sustainability was not new, I decided their input would be valuable even without photos.

My initial contact in the Viking community was someone whom I'd known for several years. Having recruited him, he was gave me the names of a few other people of various backgrounds. All subsequent recruits were via the snowball method, referred by participants. Potential participants were generally contacted over the phone; four were approached in person. All youth participants but one were recruited via the youth group as I had permission from the leader to approach his group. I attempted to recruit more youth via referrals from the initial participants but failed to do so except for one instance.

After introducing myself as a University of Alberta graduate student, I explained to potential participants that I was seeking people from the community of Viking to participate in a research project investigating community sustainability in the community of Viking. If they chose to participate, they would be asked to photograph things that they considered contributed to community sustainability and things that hindered it. If the potential recruit expressed an interest in participating, I arranged a time to meet and deliver a camera and an official consent form, information sheet, and instructions for taking photos, all of which had prior approval from the ethics committee and were printed on University of Alberta, Department of Rural Economy letterhead (Appendix B). In addition to giving the written information, I verbally explained it to ensure complete understanding of the time commitment and that a participant would incur no expense for either the camera, mailing it back to me, or photo developing.

The consent form, and my verbal explanation of it, ensured that participants knew that they had the right to withdraw at any time[9], that their interviews would only be heard in full by myself and a transcriber, and that, unless they indicated otherwise, that their photos may be used in my thesis, any articles I may write, and presentations given at conferences. With youth, both a parent and the participant signed the form. The information sheet suggested that participants try to complete their photos within a week. Some did complete the project in good time, some needed one or two reminders, and some had to wait until the end of seeding and spraying until the photos could be completed. Once the cameras were returned, I developed the photos and set a time for the interview.

Analysis

As analysis begins with the choices of method, questions, and participant selection (Rapley, 2004), analytic action has been present throughout the project. With an academic background in environmental science and a working background in environmentally sustainable agriculture extension, my interest in people's views of community sustainability arose due to a felt need to marry the natural science basis of sustainability with the science of sociology. It was evident to me that approaching sustainability from primarily a single dimension was woefully inadequate. The questions in my interview guide more heavily reflected the social concepts of sense of place and social capital, as I had assumed that issues addressing the environmental and economic dimensions would come out in the photographs and photo-led discussion. That assumption wasn't entirely borne out.

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[9] Two participants did so, some time after initially committing to the project.

With interviews being a co-production of knowledge (Rapley, 2004), from the first interview there was analysis occurring both during the interviews and afterwards. Having completed more than one interview I began to create initial, loose categories centred on the dimensions of sustainability, and the concepts of sense of place, social capital, power and knowledge. Numerous descriptive or explanatory codes were developed for each of those categories. It was worth keeping in mind that analysis had to take into account "*what actually happened* – how [our] interaction produced that trajectory of talk and how specific versions of reality are co-constructed" (Rapley, 2004). That is, recognizing that some participants reflected a more hegemonic economic expansionist understanding of sustainability while others did not, the discourse between us affected how participants' understanding was communicated. With increasing experience interviewing, reflection upon each interaction affected subsequent interviews such that the final interviews probed focus areas more deeply than initial interviews.

Analytical Framework

Though utilizing the tools of categories and coding from grounded theory, this project did not follow grounded theory as I did not define, or necessarily obtain, saturation as the end point of the research (Charmaz, 2000). Furthermore, I made use of existing categories, looking for if and how the data fit within them. None-the-less as the approach was not to predict but rather to understand and interpret how participants "construct their realities" (Charmaz, 2000), it mimicked grounded theory format.

Working in an interative process between interviews, transcripts and photos, analysis built from the initial interview. It became clear that some of my preconceptions were more justified than others. For instance, while the ecological environment did not hold primacy for many participants, the social environment was critical for everyone. Thus my line of questioning had to be adjusted to reduce emphasis on the social dimension, which was frequently raised without prompting, and increase emphasis on the environmental dimension, which did not appear as naturally as I had assumed it would. I was correct in my assumption that the economic dimension would be apparent in the photos.

While I did very little of my own transcription, as I engage and digest things best through visual medium, the repeated reading of transcripts as they became available continued to reveal and clarify codes and themes. Transcripts were not recorded for conversational analysis and the meaningless words – 'uh,' 'you know,' 'like,' 'um' – were not recorded. Also in one instance where a participant revealed a personal story not relevant to the research, I requested that it not be transcribed.

Negative cases, contradictions and variations are all presented in the results as the study seeks to explain a community's views of community sustainability. The most significant outlier was an interview that focused exclusively on the community outside of town. Though I would presume that Viking was also part of the participants functional community, as both work and relatives were located in the town, I was unable to pursue the reason for the rural focus due to time limitations. The full range of views were important and relevant to the research.

Photographs

The reasons for engaging a visual method were explained previously. The initial conception of photographs as an integral part and basis of interviews, influenced the way the photos were used. Though photos were not analyzed *per se*, their existence influenced the textual analysis. Participant photos have a different purpose than those generated by the researcher as visual records (Prosser and Schwartz, 1998). However, even when photos are produced by participants for the purposes of photo-elicitation, there are differences in their analytic potential. Such photos range from being mere illustrations of interview transcripts to existing in a synergistic relationship with the text such that meaning is dependent upon coexistence of photo and text (Felstead *et al.*, 2004). Many of the photos taken by my participants were mainly illustrative of elements of community sustainability. Photos of the hospital and school are examples of illustrative photos. However even the illustrative photos, for some participants, had synergistic relationship with interview text inasmuch as there was a further story that was not revealed by the photo alone.

Felstead *et al.* (2004) found the *combination* of the visual and the written to be critical in comprehending their informants comprehension of and functioning in collective offices. The photos without the words were meaningless to the researchers. Without the photos, the words lacked the depth that allowed Felstead *et al.* a profound analysis of the nature of the collective working environment. While there were rare instances in which the photos and text were synergistic, the combination of the two was not as critical as I had presumed it would be. Had I not done the interviewing myself, the photos would have been more important, in some cases, as they illuminate the passion that was more evident in vocal expression than in text. For example, in the text that accompanies the photo below does not project the love, care and work that has gone into the garden which is evident in the photo. There is pride in that patch of ground that was tonal reflected but not textually.

> . . . the little strawberry patch. There again it's, if somebody turns the temperature of the heat down and we get some rain, it'll be a really good little U-pick. I guess the reason I took that is that little patch of garden and that greenhouse is just bountiful (rural agricultural male).

In this research project a majority of the photos did not exist in any kind of synergy with the text, though the text is an important complement as many participants interpreted their photos in a far different manner than I had expected. However, given the limitations of that which is visually accessible to express an individual's feeling or conceptualization, it was inadvisable to attempt to analyze the photographs separate from the context of the interview. Indeed, it happens that photos which are nearly identical visually represent not only different but *opposite* things to participants with regard to the research issue (Gloor and Meier, 2000). Photos of the Cargill grain elevator in Viking are an example of representations of opposites: economically beneficial to the community and economically detrimental to the community.

Photos do not inherently hold meaning: meaning is sought of and with the viewers (Harper, 2003; Radley *et al.*, 2005; Schwartz, 1989). In the case of participant generated photos, the meaning sought is that with which the photographer imbues the photo, which may be symbolic (Clark-Ibáñez, 2004) or metaphoric (Harper, 2003). The photo is a visualization of the participants' engagement with the world, generally (Radley and Taylor, 2003) and with the research topic, specifically. Symbols and metaphors are expressions of creativity that mightn't emerge with verbal interviews alone. It was this potential depth and richness of the concept of sustainability that I sought to obtain. There were photos whose meaning was very much symbolic and individual to the participant: I would not necessarily have interpreted photos in the manner that the participants did so. A photo of deer on cropland in early spring was not about human-wildlife conflict, and only moderately about the ecology of wildlife in human modified areas. It's main meaning was cultural, representing biophilia in terms of the deer herd being a winter-long topic of conversation and concern among those who 'knew' them.

While I was interested in the congruence between conceptualizations of sustainability and: (1) those dimensions typically considered to be aspects of sustainability; (2) inherent worldview, expressions of knowledge and power; and (3) sense of place and social capital, I was open to other categories that emerged as the research proceeded.

Validity in qualitative research cannot be assessed in the same manner as it is in quantitative research. In order to address the question of validity in this study, I tried to establish both credibility and transferability. Credibility is established by "both ensuring that research is carried out according to the canons of good scientific practice *and* submitting research findings to the members of the social worlds studied for confirmation that [I] correctly understood their social world" (Bryman and Teevan, 2005: 150, emphasis in original). Seale (2004), citing Hammersley (1992), further develops the idea of credibility in terms of relevance to a particular community, plausibility of, and evidentiary support for, theoretical assertions. Transferability corresponds to the idea of generalizability in quantitative research and involves providing detailed accounts that allow others to judge the transferability of the research to other contexts (Bryman and Teevan, 2005: 150).

After analysis, one must present the completed 'story' of the research. Important in this presentation is acknowledging that the context in which the photo is placed gives it meaning, whether in comparison to another image or via the caption (Harper, 2003). In writing up the research the "images [will] become parts of statements; visual phrases that elaborate verbal arguments" (Harper, 2003: 262). That being the case, I was careful that the photos remained in the same context as was given by their producer, often appearing with the participants' own words.

Ethics

Following University of Alberta, Faculty of Agriculture, Life Sciences and Environment ethics guidelines, participants had the project explained to them along with ensuring that they knew their right to withdraw at any time and that their interviews would only be seen by myself and the transcriber, who signed a confidentiality form. Furthermore, consent was gained to utilized photographs in my thesis and other publications. Participants and/or their parents signed the consent. They were also asked to gain the written consent of others, if they chose to take identifiable photos of people, both consent to have a photo taken and to have it potentially published. The consent forms and letter of approval from the ethics board are in Appendix B.

Chapter Five

FINDINGS

This research project was based upon a qualitative visual method that, though guided by three research questions, left the direction of research open to the participants. Analysis is grounded in previous study in the literature covering sustainability, sense of place and social capital. This chapter presents data that addressed the following research questions:

1. How do individuals visualize sustainability in their community?
2. Does sense of place emerge as a component of community sustainability? If so, how is it expressed as playing into community sustainability?
3. Does social capital emerge as a component of community sustainability? If so, how is it expressed as playing into community sustainability?
4. How are individuals' conceptions of sustainability expressed? i.e. are they more or less reflective of economic expansionist hegemony? Are there 'privileged' knowledges? Do issues of power, control and agency enter into conceptualizations of community sustainability?

Each of the following sections will explicate the data pertaining to that question. As the first question is very broad and the photographs dictated the direction of the interviews pertaining to this topic, it will be divided into relevant subsections. Quotes from participants have been edited or paraphrased to take out redundancies, improve the flow and/or to preserve the anonymity of the speaker or others. Participants are identified by their dwelling location – town or rural – gender and general field of current or former occupation – social, industry, agriculture, or services. 'Social' occupations include those in education, health care, social services, government and ministry. 'Industry' includes those employed in the oil and gas sector. 'Agriculture' identifies those who are involved in the direct production of crops and/or livestock. Services indicates involvement in the service industry, which would include cashiers, hospitality industry, banking, etc. More specific labels are not provided in order to preserve participant anonymity and because any given community will include people in a range of occupations. While there may be argument for occupation influencing worldview, the importance is identifying the range of worldviews present rather than a connection between specific occupations and worldviews. The identified range of conceptualizations is the necessary information in bridging knowledge gaps, creating policy, and implementing action.

Study Site[10] and Sample Characteristics

The study was delimited to the town of Viking, Alberta and its rural surrounds, a community with roots in natural resource development: agriculture and natural gas. The town of Viking was established in 1909, suggesting active agriculture in the region for about a century. The petroleum industry has almost as long a history in the area as agriculture. In 1914 a major gas field blew in Viking (Palmer and Palmer, 1990) and by 1923

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[10] Unless otherwise indicated, all statistical information comes from 2006 Community Profiles for Beaver County and Viking Town. Available from http://www12.statcan.ca/english/census06/data/profiles/community Last modified

Edmonton was being provided with natural gas following the completion of a 130 kilometre pipeline from Viking (Alberta Energy, 2008). The participants in this study certainly mentioned the industry as an important contributor to the economic life of community, but did not raise any points of controversy which can be present where the industry operates.[11] This may be changing, as outside Viking community but in Beaver County, Sherrit is proposing a coal gasification project to produce power: local landowners are objecting (Farm 'n' Friends, January 27, 2008).

Turning to demographics, the town of Viking's population had decreased 2.7% between 1996 and 2001 from 1,081 to 1,052. By 2006 it had recovered to the 1996 level. Participants in the study live in, or have frequent interaction in, the town. Occurring in the Aspen Parkland ecoregion, Viking is in Beaver County, southeast of Edmonton and lies at the junction of primary Highways 36

03/03/2008, accessed 27/03/2008.

[11] For the extreme example, see Andrew Nikiforuk's (2001) *Saboteurs: Wiebo Ludwig's War Against Big Oil.*

and 14. It is also on the railway. In Beaver County, the population increased 0.6% from 2001. The median age in Viking is 47.5 and 84.3% of the population is aged 15 and older. Beaver County population has a younger median age of 40.2, due to the fact that fewer seniors live rurally. For example, only 1.8% of the rural population is over 80 years of age, while 13.8% of the town of Viking's population is in that age bracket. Another factor contributing to Viking's high senior population is the presence of a lodge and nursing home.

VIALTA LODGE

There isn't a lot of turnover in Viking's population: 86.8% of the population lived at the same address a year before the 2006 census, down from 93.6% in 2001, while 76.4% lived at the same address 5 years before the census. In the County, 92.3% of the population lived at the same address the year prior to the census, while 72.9% lived at the same address five years prior. Provincially, only 52.2% lived at the same address five years prior to census.

The community is quite ethnically homogeneous. In the 2006 census, only 30 individuals, representing 2.4 percent of the population were identified visible minorities. Less than one percent of the county's population belongs to a visible minority. The aboriginal-identity population was 2.5 percent of the population in the town and 1.9 percent in the county.

In terms of socio-economic status, the 2005 income for lone-parent families was about one thousand dollars less than the provincial average in Viking but four thousand dollars more than the provincial average in the county. The median income in 2005 for all families in Beaver County was $16, 309 dollars less than the provincial average of $73, 823, while in the town median income for all families was only $11, 780 less than the provincial average.

In the town, 14.5 percent of census families were lone parent families while only 7.8 percent of the county's families were lone parent. In both places there were a little more than twice as many female than male lone parent families. The average number of persons in a family in both town and county was 2.9.

Compared to the provincial average (23.4%), there is a greater proportion of individuals with no certificate, diploma or equivalent in both Viking and Beaver County, 30 percent and 35 percent of the population, respectively (Table 1). Though formal education may be under the provincial average, there isn't necessarily a lack of appreciation for education. In February, 2007, Viking hosted a series of lectures given by various professors from the University of Albert on the topic of 'Relearning Community.' One older participant pointed out that while he hadn't bothered to attend university, he was glad to have attended the five week series.

Table 1. Educational attainment in the town of Viking and Beaver County

Educational attainment	Viking Town			Beaver County		
	Total	Male	Female	Total	Male	Female
Total population 15 years and over	885	395	490	4,435	2,315	2,115
No certificate, diploma or degree	270	115	160	1,570	870	705
High school certificate or equivalent	205	115	85	1,005	530	470
Apprenticeship or trades certificate or diploma	180	85	95	615	425	190
College, CEGEP or other non-university certificate or diploma	135	45	95	750	310	440
University certificate or diploma below the bachelor level	30	10	25	140	60	75
University certificate, diploma or degree	60	25	35	350	120	235

Source: Statistics Canada. 2007. *Viking, Alberta* (table). *2006 Community Profiles*. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. http://www12.statcan.ca/english/census06/data/profiles/community/Index.cfm?Lang=E (accessed July 3, 2008).

In terms of occupations of the experienced labour force, sales and service, and trades, transport, equipment operators and related occupations represent just under half of the occupations of town dwellers. Trades, transport, equipment operators and related occupations, and occupations unique to primary industry represent over half of the County's occupations. Twenty five percent of the town's experienced labour force is employed in health and social services. The percentage of the experienced labour force involved in agriculture and other resource-based industries was 18.9% in Viking and 34.9% in the County. However, as Statistics Canada Community Profiles do not separate agriculture from the oil and gas industry, it is impossible to know the proportion of a community's labour force involved in each of those industries.

As far as the farm population, in 2006 there were 795 farms in Beaver County, with 1,140 operators (815 male, 325 female). The average age of farm operators was 52.3 years. The average farm size was 353 hectares, smaller than the provincial average of 427 hectares.

The sample consisted of 27 individuals, though only 23 sets of photos – and 25 interviews. In one instance the project was completed by a husband and wife and, in another, by siblings; two interviews were conducted without participant photos. In these cases, the individuals indicated an interest in giving an interview, but not in taking the photographs. Considering the nature of the work in which those individuals engaged, photography for the sake of engaging a thought process on sustainability would have been redundant. As I did not wish to lose the opportunity for what I considered would be valuable input, those two were interviewed without photos. In order for the sample to be generally representative – not in the statistical sense – of a rural community, participants varied by gender, age, occupation and place of residence. The age range in the sample was from 13 to 86 years. Occupations included conventional and sustainable farmers[12], professionals, service industry workers and members of local government. In terms of dwelling location and gender there were six rural men; five rural women; four town men; and three town women. I also included one woman who had grown up in the community and was currently working there but lived outside the Viking community. The youth sample consisted of four rural females; one rural male; two town females and one town male. A summary of sample characteristics may be viewed in Table 2.

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[12] To slightly modify the definitions put forward in the literature review, in this study sustainable farmers are those whose farming practices involve replacing environmentally harmful practices, such as high chemical use, with less harmful ones and who are working with ecological systems and cycles – biological pest control, diversity in crops and animals, enhancing water and nutrient cycles, for example (Bird, *et al.*, 1995). This category includes certified and uncertified organic farmers and those who are working at changing their operations away from the industrial model. Conventional farmers conform to the industrial model, "characterized by mechanization, monocultures, and the use of synthetic inputs such as chemical fertilizers and pesticides, with an emphasis on

Table 2. Viking community sample characteristics, 2007

	Town	Rural	
Gender		**Farm-based**	
	Acreage		
Male	5	5	2
Female*	5	7	2
Participant Age			
13-18	3	3	2
30-39	1	4	0
40-49	2	3	0
50-59	2	2	2
80 and above	2	0	0
Length of Residence/Connection			
multi-generation	3	11	0
more than 50 years	2	0	0
10 to 49 years**	4	1	3
less than 10 years	2	0	0

*in addition to those in the table, there was one more female in her 30s who grew up in and works in Viking but lives in another community

** two in this category married people with multi-generational connections

The sample was non-random, gathered through snowball sampling. My initial contact in the community suggested a few people and I worked from there, asking participants to suggest one or two people whom they thought could contribute another viewpoint to the project. Out of the suggestions, I tried to achieve a balance of age, occupation, and gender. The youth sample is very narrow as it is mainly drawn from the town's interdenominational youth group. My contact in the community, one of the youth group leaders, gave me

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maximizing productivity and profitability" (Eicher, UCDavis Cooperative Extension, 2003).

permission to approach the youth for inclusion in the project. I believe that having the recommendation of the leader was the only thing that ensured the participation of the two young men who did take part. Young women were far more willing, cooperative and talkative than the young men who, perhaps, had more interesting things to do than put time into taking photos and discussing them.

I would not consider the group of participants to be inclusive of the various 'types' of people who live in the community as I strongly suspect that I was referred to individuals who, in the minds of those doing the referring, were considered members of the same in-group, demonstrating the mental boundaries of multiple communities in the same place (Cohen, 1985). I also feel that key people are over-represented in my sample, as I found that many people would refer me to the same individuals.

Individual Conceptualizations of Community Sustainability

In spite of instructions that invited participants to include impediments to sustainability in their photos, few did so. All but one of the youth photos focused on elements of the community that positively contributed to sustainability. Negative issues tended to be framed more in terms of challenges and were frequently the opposite of the positive in the photograph. For example, the hospital and doctors were positive contributors to community sustainability, the challenge was ensuring that the community continued to have enough doctors. Recreation was identified as a positive but it was posited that it would be better if there were a greater variety of recreational opportunities. The bulk of the few outright negative photographs focused on the environmental dimension; the other negatives were empty lots or buildings which needed to be removed or developed/occupied by a certain class of people to ensure community sustainability, i.e. those of lower socio-economic standing were not considered to so contribute. The fact that the positive contributors to sustainability were highlighted in the photos may reflect a strong sense of place as those with a stronger sense of place tend to focus on the positive (Hay, 1988).

Sustainability has been defined as consisting of social, economic, environmental, cultural and political dimensions. Collectively, all interviews addressed each of these though individual interviews varied in the degree to which dimensions were addressed. Only six interviews addressed all five. Another six discussed four dimensions, eleven raised three dimensions and only two interviews discussed only two of the dimensions. Just under half the interviews (eleven) covered the major three dimensions of social, economic, and environment. As expected, the economy was addressed in all but one interview. However, social issues were identified as equally important.[13] Thus while Viking community citizens demonstrate a broad and varied conceptualization of community sustainability, the major dimensions do appear. Though it is extremely artificial to separate the dimensions of sustainability, I will discuss each separately below, beginning with the two dimensions which, though not least important, were least discussed in the interviews.

Governance Dimension

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[13] One rural female participant, focused exclusively on the rural community and due to a limited time space for the interview, I was unable to explore if her view of community extended to the town (I presume that it must to some extent as she works in town). Consequently, her view of sustainability is focused on environment and community heritage.

VIKING
MUNICIPAL
LIBRARY
NEW HOURS
VIKING
CIVIC CENTRE

Figure 1. Governance focused on government, particularly municipal.

Though governance can be inclusive of government, it is not exclusively about government. It is "the process whereby societies or organizations make important decisions, determine whom they involve and how they render account" (Plumptre, no date). In spite of the fact that governance is a broad dimension, participants discussions of decision making structures centred exclusively on government (Figure 1). Though not identified in the same volume of interviews as the 'main three' dimensions of sustainability, government, particularly local government, was none-the-less made note of in nearly half (eleven) of the interviews. From the basic necessity of a body to create and enforce bylaws, noted by youth participants, to being "by far the most transparent and most accountable level of government," (town male, industry), local government was identified as both stepping stone to the advancement of community sustainability and stumbling block in preventing community sustainability.

> I think between the town and the county and somewhat the province and stuff, that they're working very hard to do some of these, to make these small communities viable (rural female, agriculture/social).

*

> You see we've had over the years we've had some companies who've wanted to come here and set up a little [business], but it

> got shut down by the people on the town council because quite frankly they're your backwards thinkers. We didn't do this before. We didn't need this before (rural male, social).

Municipal elections were pending during interviews and, consequently, concern was expressed over the lack of individuals who appeared interested in running for council. The same kind of demand that was identified as an obstacle for getting volunteers was noted in the difficulties in getting people to run for local office.

> In essence it's like a volunteer position. With what you get reimbursed, you sure as hell don't get in it for the money, that's for sure. So it's just like a volunteer position but it's become very more demanding (town male, industry).

A major concern over a lack of people to run was that the town could lose its council and end up governed by the county, as has happened in other small towns in the past. While the county council is not significantly better or worse than the Viking town council – those who live in the county had similar positive and negative views about their council as those in the town of Viking had about theirs – the preference was that control remain as local as possible.

> I don't believe in big school divisions or big hospital units, big to hasn't been proven to me that it's better and you lose the local input (town female, social).

Enough people did step up to fill town council, but all positions were filled by acclamation, with three of seven individuals new to council. Apart from discussions regarding the lack of interest in running for council, and the fact that local government members are accessible to the public, there was no consideration of the issue of civic participation in local governance.

Beyond local government, and identified to a lesser degree as key to community sustainability, were higher levels of government. Those mentioning the role of higher levels of government – provincial or federal – had also discussed the role of the local, though not all those discussing local government identified a role for higher government. The provincial, and to a lesser degree the federal, governments were seen as a resource, a source of revenue to develop projects that contribute to the sustainability of a community. The potential for changing priorities at these levels of government was a concern: should rural areas lose priority, then there would be a concurrent reduction in accessibility to resources. At this time there remains more rural MLAs than urban. However, before another provincial election, it is required that the boundaries be redrawn to reflect the fact that approximately 80 percent of Albertans are urban. Thus, in the future, it is fully conceivable that rural areas will be forced to fend more for themselves than is currently the case.

A form of bridging social capital that can provide resources is government partnerships. Such partnerships both at the municipal level and between the municipalities and provincial or federal governments were recognized as important to community sustainability. The local municipal partnerships were most often identified as the means by which sustainability was most easily achieved.

For all that government resources were seen as important, one participant rejected the involvement of higher government due to their unwillingness to support the locality unconditionally.

> As far as big government and big brother and stuff like that, I wouldn't want them to come in and say, 'This is what we're doing and this is how we're doing it" They don't always know. . . . If they would listen to the locals and just go there for full support, then yeah, I agree with it but they're never there just for support. They always have their own agenda. And that's the problem. If you could have somebody with unlimited funds and no agenda, that'd be excellent (rural male, agriculture).

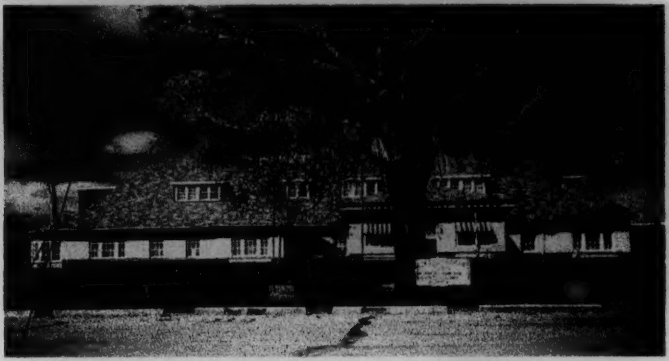
Cultural Dimension

Some aspect of culture – local art, community and/or cultural heritage, or local stories – was considered in eleven interviews. Local art and community heritage tended to mesh together in reference to the old train station, as it has been restored and is run by the local art guild where they hold classes and display the works of local artists.

> This one's showing the train station, which was, it's like, it's a really old building and it continues to change. Like now it's become, they display art, like art from the school students and from seniors or from anybody, they display art there (town female youth).

Though the presence of the art gallery was appreciated, it was felt that arts development could be stronger and tended to be difficult in a small town.

Community heritage was a focus on preservation of the past as important to moving to the future, and remembering with pride those who settled the area.



> This is the museum. It just shows like all of the things of our past, like all the good things that have happened and how things used to be and it's important that we don't forget about that.
>
> *I: Why do you think that we should remember?*
>
> Remember these things? I think it's important because otherwise we might forget what it was like before. Like we didn't, Viking just all of a sudden didn't just come up there. It took awhile for development to happen (rural female youth).

Cultural heritage, on the other hand, focused on the Scandinavian heritage of the original settlers. That heritage was celebrated through Scandinavian night, Troll park, the Scandinavian room in the museum, and rosemaling (Norwegian decorative painting). Such celebration was felt to be a way of honouring the past and creating community.

> I think the whole Scandinavian theme, of developing it has helped. I think there's a pride in that, even by people who are not Scandinavian. They realize that when we have these dos [Scandinavian night] we're sort of honouring all the different groups that have come here (town male, social).

It was also felt that the heritage of the area could be utilized in branding the community and furthering economic development.

> If you had a sister city [in Norway], like we say you got to think global, so there's always the possibility of us traveling over there being guests in their country and inviting them over here and them being guests in our town too, eh. So there's a lot of connections here and I think that's one thing a person could go on as a sister community (town male, industry)

Economic Dimension

In discussions of economic sustainability topics covered included: the economic bases of the community; major employers and employment opportunities; the necessity for local economy along with the problems of maintaining it and its relationship in the wider international/global economy including agriculture and agribusiness; and local development and infrastructure.

Viking's economy is predominantly resource based: the natural gas field and agriculture. Unlike agriculture, which has been consolidating and thus losing population, the oil and gas industry has maintained the town in terms of population and economic development. Participants pointed to the spin-off businesses in the community which were related to the presence of the petroleum industry. For all that several participants were confident of the industry benefiting the community economically, two participants felt that there was a distinct problem in that the town was single-resource dependent. Agriculture was recognized as a factor in the local economy but was not a huge employer consequently there would be significant impacts on the town if they lost the petroleum industry.

> If the oil patch does collapse, I mean the economy of the small town like this will collapse too cause there's nothing else here, and then when the people go, there goes your IGA and that type, the school goes too. You know what I'm saying? Yeah, I don't, I don't think there is anything other than oil. I'm sitting here thinking and I can't, pulling my brain out here and I can't see anything, you know. (rural male, social).

Though both this participant and others noted that health care (ten interviews) and the school (five interviews) were important employers in the town, resource dependence was still a major impediment to sustainability with this participant's concern being that the loss of the major employer would result in diminishing population, raising the spectre of school and hospital closure.

Both industrial and social services were identified in three interviews as opportunities for farmers and/or their wives to supplement farm income. Of the interviews with those involved in agriculture, five of nine individuals were employed off-farm, one in education, one in health care. The one working in education also mentioned a spouse employed off-farm. Thus any negative impact in the local petroleum industry would impact the local farming population as well.

Lack of sufficient local employment opportunities was identified in nine interviews, a third of which were youth. One male youth considered there to be "lots of work out here" but that was in his field of construction. Not all those employed in the fields of education and health care live locally. People from surrounding smaller communities are employed in Viking but so are those from larger communities. In the interview with the former local who teaches in the school, there was recognition of the fact job opportunities in a community weren't always a sufficient reason to live there.

> I'm sure there are young people from our community who have gone into education or nursing and sometimes it's hard. They just haven't been able to get a job there so. I don't know. I don't know why we're from far away. And sometimes just chosen because wherever they're from they've just chosen to stay there and drive (expat female, social)

If the provision of job opportunities is necessary but insufficient for community sustainability, so is the local economy. In spite of the fact that for some, youth in particular, simply the presence of basic businesses was exemplary of community sustainability, the situation was much more complex. The local economy was considered necessary for community sustainability. The community needs local business in order to keep money circulating within the community, provide employment opportunities, and possibly attract people to town.

> This is to show that an active business community is important to keep the community going. That's our main street. I believe that's something that any small town has a real challenge having, especially with the larger centers and all the big stores that are coming up, especially, you know, close by. Wal-mart has come to Vegreville and Wainwright and Camrose and, so I think that's really difficult but in order to keep the town alive you still need to have those entrepreneurs, otherwise if you have no services, what's to draw the people to the town? (rural female, agriculture/social).

However, maintaining and enhancing the local economy was seen to be a significant challenge to sustainability. Most weeks, the local weekly newspaper prints little text boxes saying things like, "Support your local business" and "shop at home." One participant made reference to the 'shop at home' strategy, but felt that it was approached badly by local businessmen.

> we try to shop as much as we can at home but sometimes they make you feel, sometimes the shopkeepers make you feel guilty for not, for shopping elsewhere and I think that's the wrong approach 'cause I don't want to feel guilty (town male, social).

The 'shop at home' movement was not entirely effective as even those who acknowledge the importance of keeping local businesses going, admit to out-of-town purchases, indicating that awareness of an issue is insufficient to drive action on it.

> I'm guilty too, I do a lot of shopping out of town and you feel somewhat guilty but you're struggling monetary wise that you feel that you have to be, to make good business sense. So I think it's talked about often and I think people realize how difficult it is on the community when they shop outside of the community but, yeah, when it comes down to making the choice because the cost of it always wins out over the community, and that's why the communities are suffering, right? (rural female, agriculture/social)

Four other participants identified the cost of things as a major factor in not supporting local business. Cost of products and quality, particularly noted in regard to fresh produce, were noted as significant challenges to maintaining the local economy. The fact of larger towns having chain stores, particularly Wal-Mart, that can offer goods at cheaper prices was addressed in six interviews. Recognizing the fact that competition with such chains is not feasible, some participants suggested that local business needed to focus on quality of service and unique products, such as Viking Meats' production of Viking wieners.

> I think a challenge would be to develop sort of unique enough businesses or services, like niche sorts of things. Like you can't compete with the Wal-Marts of the world, but you know, like the scrap shop lady. Like she's got a great little business and it's more of a niche sort of thing. Yeah, so you have to create things that are kind of unique and, yeah, cause it is, it's hard to compete with the big businesses (town female, social).[14]

In one interview, support for local business, in spite of products perhaps being cheaper elsewhere was seen as key to maintaining the community and ensuring future options.

> Oh, it's cheaper in Camrose. Yeah, go buy it in Camrose and one day you'll *have* to go to Camrose to get it because the local dealer here won't be here. If you don't support them, they're not going to be here and then you'll have to go there and that's, I don't want that. I don't want the automotive store to be closed. I don't want the mechanics to have to leave town. I don't want the hardware store to close down. Those are key businesses in town (rural male, agriculture).

Local businesses face a dual challenge. In addition to needing to charge higher prices than box stores, it is difficult to keep employees. In the super-heated Alberta economy, the service industry can't afford to pay industry salaries and consequently there were difficulties keeping staff. A local restaurant was closing in the afternoon for lack of staff. Two different farmers indicated that keeping hired hands was a challenge for the same reasons.

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[14] The scrap shop closed several months after this interview.

A local food economy was emphasized in six – three of which were with non-farmers – of the eighteen interviews that raised the issue of local economy.

> It'll [a local food economy] be good for our community. It'll be good for our health. It'll be good for our jobs, for our young people. It'll be good for food processing. It'd be good for tourism. There's not a negative involved in growing the local food economy (rural male, agriculture).

A local food economy is a support to farming because it supports small, sustainable farmers:

> to make a living off the land we have to have local economies because we, I cannot compete in a world market (rural male, agriculture).

There is no farmer who can compete individually in a world market.

It is through agriculture that the challenges of globalization were made most evident. Even the more conventional farmers recognized the challenges inherent in the current system. In fact it was suggested that changes in agriculture would need to be global and revolutionary, much like those of the Agricultural and Industrial Revolutions.

> The way the world is, it would be a global change. So it could happen, 'cause environmental pressures really comes down, Kyoto comes in or whatever and now you're farming carbon credits instead of just farming. So then, that can factor into that, too. So there's a lot of issues (rural male, agriculture).

A significant part of the challenge with the local economy is the structures in the national/global economy that create price inequalities preventing a local food economy, and that take cash out of the community. A perfect example was given with the Cargill elevator (Figure 2). The discussions of photos of the Cargill elevator ranged from it being simply a benefit to the community (five interviews) to the complex interaction of local and global (three interviews). One that mentioned the benefit of the elevator, also identified the problems with the high costs of inputs which rise every time grain prices go up. Though she did not explicitly connect the Cargill corporation with the pressures felt by farmers due to agro-industrialization, she was very much aware of the issues.

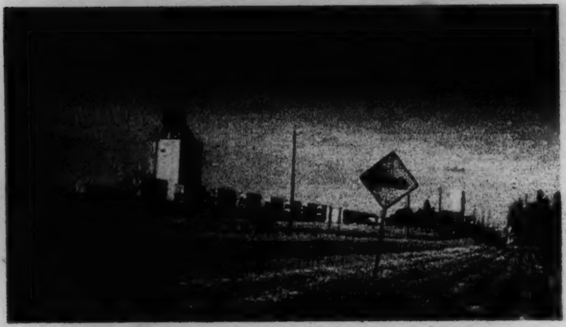

Figure 2. Cargill's inland terminal and the train. Indicators of community sustainability or challenges to it?

The globalization of the world was recognized: "I mean the world is getting global, not just your local area" (town male, industry). However there was a conundrum expressed over local and global economies, balancing one with the other rather than one replacing the other.

> Somewhere we need a tie-in to the world economy . . . and like it or not, we need to have income coming in from outside cause if all we're doing is local, some money's going to seep out and something has to get back in. Otherwise eventually we'll go broke. So, the obvious two industries we have are agriculture and oil or gas, so somehow we still need to have those happening get our products to market and, you know, I love the [local economy] things that [a local individual] is doing. That's where the future mostly lies but to a point we also still need connections internationally (town male, social).

With farmers forming about half the sample, it isn't surprising that examples of globalization tended to have an agricultural connection. Agro-industrialization was seen as the current and future trend in two farm, one acreage and two town interviews: the future of farming will be large and corporate because "there's not enough profit margin to survive" (rural female, agriculture/social). Another participant suggested that it seemed unlikely that young people would return to farm because the debt required to start up would be unfeasible. Certainly, two of the farmers interviewed were hesitant about encouraging their offspring to farm. Here, too there was a tension in that participants wanted to instill their offspring with the competencies necessary to be involved in farming yet not wanting to put them in a position of enduring hardship; of wanting to see the agricultural population renewed but not at the cost of well-being.

> our last picture here again goes back to the farming. It's basically my son raising a few chickens for local people and that's trying to get youth back into the farming atmosphere, the business of farming. He bought the chickens on his own. His grandfather bought some of the feed. I gave him the rest of the feed. He sold the chickens to us. He sold some to his grandparents, yadda yadda yadda. But it's kind of, you're starting a snowball hopefully. You know I don't necessarily wish him the hardships that we had but, you know, you want to get him involved to start doing things like that, to know what it's like to raise something, finish the product, you know; market it. Get the dollars, know what it takes to actually get it there and that kind of thing. So that's huge. That's kind of part and parcel with the farms and bringing people back and that kind of thing (rural agricultural male).

Input costs and commodity prices were identified as a key challenge to farmers:

> P2: The selling of your commodity prices hasn't changed much over the last ten or fifteen years but (P: Inputs have.) your inputs have (P: Tenfold) yeah (rural agricultural couple, P2 female, social; P male).

Such challenges were identified as ones not faced in any other business:

> if you went to any business anywhere in the world and said okay your cost of one of the main requirements that you need to do business is going to double [in less than a year], how would a lot of them react? (P2: . . . It isn't going to happen, anywhere.) But the agriculture community seems to have to deal with that on a regular basis (rural agricultural couple, male, P2- female, social).

It is worth noting that since these interviews, prices of commodities have risen substantially, in part due to the growth of and speculation about the biofuel industry, in part due to weather causing concern for reduced size and quality of crops. While such a price rise is of benefit to grain farmers, the implications are serious for livestock producers, as increased grain prices increases their feed input costs.

With fewer returning young farmers and an increase in large and corporate farms, there are consequences to community. However, the reverse was also identified by one farmer. In parts of the province where land is being taken up by urban development, farmers can sell out for substantial sums and purchase farms in communities like Viking. One participant noted that a friend had done just that.

The solutions put forward for the continued survival of farmers, whether sustainable or conventional agriculture, were diversification and marketing. Diversification, however, was presented as a double-edged sword.

> P2: We're diversified. . . we've been farming for fifteen years, we've seen a drought as bad as the 30's. We saw BSE and we saw the lowest hog prices in history, all within those fifteen years (P: Five years) of farming, we've had the three worst things in all of our corporate aspects of our farm, so yes, it's good to diversify

> but sometimes when you have those disaster type situations it pulls the things that were supposed to be keeping you level so far down that you're still not really making it and that's hard for small farm situations too. (P: Small farms, yeah.) So diversity's got its good side but it's got its bad sides too if you hit those low, all of the lows that have happened in farming (rural agricultural couple, P male, P2 female, social).

With the rise of neoliberal globalization, the agriculture industry is losing most of its collective bargaining power. In favour of market forces, the marketing boards have been all but eliminated, with the consequence that it is insufficient for a farmer to be an excellent stockman or agronomist, it is also necessary to have business knowledge.

> You not only have to be a good farmer on growing grain, raising cattle, you got to know how to market them. You got to know when to sell and when to buy them. Maybe like hold up a bit, things don't look good, that's marketing. And I've just been kind of learning that the last three or four years cause I wasn't taught that. My father, I mean he just raised cattle and raised grain and then you go the coffee shop (rural male, agriculture/industry).

> P2: Farming's no longer the lifestyle that it used to be. It was a lifestyle and a way of making money. Now farming is a business and the lifestyle comes secondary. You have to treat your farm as a business cause if you don't you won't have a farm to be on anymore. (P: And even if you do you might not have a farm.) You have to be a smart, you have to be a business manager and run your farm that way nowadays. Whereas before, you raised your chickens and your cows and all those kind of things. . . . (P: And you had all those boards. You had the wheat board, you had the hog board, you had the) You had security in a sense. (P: you could sell your products anywhere and get a good price for them for many, many years. Now it's not) (rural agricultural couple, P, male; P2, female, social).

When it came to sustainable farming, interviews packaged diversification and marketing together, with the need to have more than one commodity AND to do your own marketing to ensure fair pricing.

> I don't think you can be a one trick pony. So we do the chickens in the pens. We do the turkeys in the pens and this year we've added the pheasants and of course we have laying hens out there. . . Custom grazers, there again it's another enterprise on the farm. Marie's little strawberry patch. There again it's, if somebody turns the temperature of the heat down and we get some rain, it'll be a really good little U-pick. . . . . . We have a little niche market. Its' really hard to get out of that paradigm, the old paradigm because everybody who's used to going to the elevator and being a price taker, I don't want that. If I can't, this year our chickens went up from $3.50 to $3.75 and if somebody wants to pay me $3 I say you know I can't do it for that because I don't want to work for nothing (rural male, agriculture).

Yet, as was noted in a casual discussion with farmers working toward an increase in direct marketing, accomplishing all aspects of production and marketing independently is time consuming and exhausting and, as such, stand as barriers to getting into sustainable farming.

Participants identified important factors supporting Viking's economy: infrastructure and urban development. Water supply (Figure 3) was the most frequently raised issue that one might consider under infrastructure, though the infrastructure ensuring that water supply was not always the issue raised with water. Viking community receives its water through a pipeline from Edmonton.

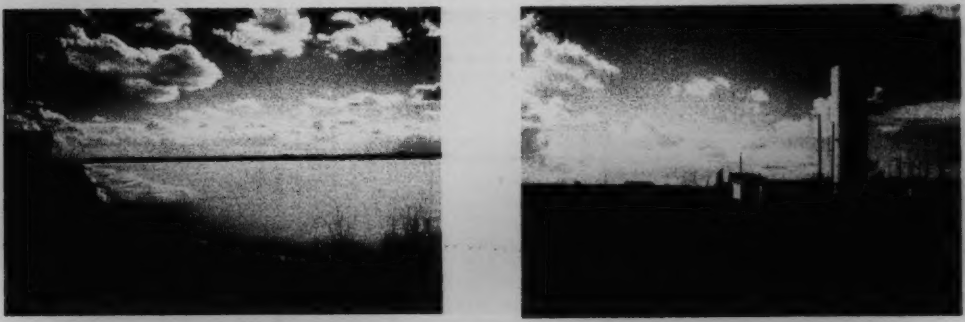

Figure 3. Town of Viking's unused water reservoir and the water tower: water from away.

The municipality chose to get on the city water after a series of dry years resulted in the water supply in the local reservoirs running so low as to cause water quality and long-term supply concerns. As with Cargill's corporate presence in the small community, the fact that Viking obtains its water from Edmonton generated mixed reaction. For some, it was a benefit as the town could guarantee a constant supply of water, important for attracting industry. However, the high cost of that water was identified as a barrier, as was the fact that the community no longer had control of its water supply. Issues of control were also identified in the price problem as several different middlemen are involved in getting water from Edmonton to Viking.

Transportation was the second most important infrastructure element identified. It included train and road transport. Like a constant supply of water, the presence of the rail line was considered key to attracting industry, even on a global scale. Conversely, the presence of the rail was also viewed as a symbol of the problems of globalization, travelling west with wealth from Viking and other rural communities in the form of grain and coming east with shipping containers from China full of consumer goods produced by exploitation because it is cheaper to produce them overseas and import them.

> We don't have to produce anything because it's economic to do it over there and use the fuel here. So to me the rail line signifies now rather than building and unifying our country as it did at the beginning, it's tearing it apart and making us weaker (rural male, agriculture).

Viking's location on the highways was also pertinent.

> Viking has amazing location. Like, its corridor to everywhere. You want to go north its easy, south its easy, east, west, whatever. Its all very easy. That's why Viking's stayed. Why doesn't Viking look like Bruce? There is a reason. Its' right on that corner of 14 and 36. It's not going to die (rural male, agriculture).

One participant noted that maintaining the local road infrastructure was something that could be improved. Potentially tied to the need for road maintenance, and definitely tied to the issues of consolidation and the end of the Crow rate – a grain transportation subsidy, is the connection between road infrastructure and grain handling.

> Inland terminals that concentrate the grain in a few local facilities [are] putting big expenses on our roads, you know, and forcing farmers to carry the cost of transportation (rural male, agriculture).

Transportation infrastructure was both present and was identified as key for sustainability, and two interviews noted that transportation itself was a challenge for those who have low income or no access to a vehicle. Physical transportation to access services was a significant barrier. The Vialta Lodge Handi-Van provides seniors transportation around the town twice a week, but the current driver wished to retire and no one else had applied.

In Town, maintenance of sidewalks was viewed as important, not only for the sake of infrastructure itself, but also for ensuring that it "keep[s] the community looking good" (town female, social). Community aesthetics were raised as a significant part of sense of place and are discussed in detail below.

Development was raised as important, in the building of new homes, the addition to the seniors' lodge and developing a new business park in conjunction with Beaver County. Growth was identified as a critical indicator of community sustainability, and it was emphasized that the Town was actually growing for the first time in years. Having and developing new lots was seen as important, in and of itself, but furthermore growth stimulates more growth and without lots available the community would not be considered a viable option for developers or incomers.

Agriculture presents an interesting component of the study. It contributes to economic sustainability but there is more to it. Though the oil and gas industry was identified as the more significant employer, and key to the local economy in terms of maintaining a working population to support that economy, it was agriculture that dominated the discussion. Part of that is due to sampling: farmers were intentionally targeted for participation. However, there were three participants with some degree of direct experience in the oilfield. While they, and others, made note of the important contribution of the industry to jobs and offshoot businesses (e.g. water trucks, oilfield service) and, in one case, identified the flaws and power imbalances that exist in the industry and between companies and farmers, there was not substantial focus on oil and gas. Part of this probably comes down to the fact of agriculture having a longer history in the community. Communities in this part of the Province were founded on agriculture. A larger part of it is due to the nature of agriculture: it is not merely a living, but a way of life. And it is a way of life that is being threatened. In many ways agriculture is its own community, composed of people who, though less than before, rely on each other for support at critical times in the season. It is not unusual to call upon extended family, friends or neighbours for help at haying, silaging, harvest or branding, for example. The community boundaries of agricultural people are broad, frequently including more than one town. One agricultural participant emphasized that in spite of involvement in another town, keeping a bank account open in Viking was important in maintaining a connection to that community.

Six interviews made particular note of the identity of the community as agricultural, four of those interviews were with non-farmers. Of those, one non-farmer also pointed to the dependence of the Town on the farming community. An additional two interviews with farmers echoed this. Three non-agricultural interviews noted that the community was a mix of town and rural, including agriculture. None of the interviews identified the Town as a gas town, though this is an economic base of the community and is reflected in the name of the hockey team – the Gas Kings. Comments on community identity occurred without any kind of direct questioning or prompting on my part.

Environmental Dimension

Contrary to my expectations, environment wasn't prominent in conceptions of community sustainability. The environmental dimension was raised in less than half of the interviews. After the first few interviews in which the environmental dimension did not appear unprompted, if the discussion of the photos had concluded without mention of the environment, I would directly question whether environmental issues were considered part of community sustainability. Perceptions of the environmental dimension of community sustainability can be grouped into agriculturally related issues, conservation issues, lack of environmental issues, and environment as aesthetic.

The most commonly cited environmental issues were those related to agriculture and frequently, though not exclusively, identified by those in agriculture who were working to make improvements. Maintaining the quality and quantity of water bodies; that grazing systems are the most sustainable form of livestock production; that those who cut bush and drain wetlands are putting immediate utility before option value; and the potential for the escape of genetically modified (GM) seeds were amongst the issues identified. Positive correlation was made between the adoption of zero-tillage practices and reduced soil erosion. The adoption of this conservation tillage method raised new sustainability challenges for a farmer who initially adopted it for environmental and economic reasons. He later abandoned it due to the high herbicide input required.

Conservation issues were mainly connected to agriculture as noted above with regard to maintaining wetlands and brush. Those who were concerned about maintaining these areas had two reasons for doing so: for wildlife and to conserve grazing option value for drought years. There was also the issue of conserving native prairie for the sake of itself, and in order to maintain natural balance. Linked to conservation, a discourse of stewardship was evident in two interviews and one photograph (Figure 4).

> Maybe it's [a preserved piece of prairie] just something unique that we can say that this is something where as a town we're responsible for this and, you know, it's protection . . . it's a unique thing that we can do and when people are looking at our town they can say that this is something they, this is something that they take some responsibly and pride in (town male, social).

*

> I'm fortunate enough to live around and on some native land that has never been cultivated. It's a little pocket of, in our area that just seems to be in the ownership of people that still honour that prairie grass and as long as they own it I don't think it ever will be broken (rural female, services).

Figure 4. Honouring the prairie

Eight interviews that talked about the environmental dimension upon direct questioning, indicated that there weren't environmental problems at play in the community, that there was nothing significant enough to challenge sustainability and/or that the environment didn't come into their conceptualization of community sustainability. Where problems were identified, they tended to be almost dismissive.

> I mean other than, you know, the chemicals that the farmers are dumping all around us, which isn't healthy. But we don't really have, I mean it's a nice looking environment (rural male, social).

Responses concerning the absence of environmental issues ranged from, "its not dirty," "we don't pollute," to "I don't think we have great environmental issues out here." Two interviews indicated a lack of interest in the topic. "Maybe people out there care about it. I'm too busy to" (town male youth). There was a balance between Town and country people in the responses that indicated a lack of environmental problems.

Of the eleven interviews in which the contribution of the environment to community sustainability had to be directly questioned, the response in five centred on the aesthetics of the community.

> I definitely think that our environment in Viking is like, with the Communities in Bloom and stuff, it's really put together and we have all these parks and stuff like that. I really like the environment in here. People take pride in their yards and they put in flowers and it's just nice to walk around and see like the beauty within the environment kind of thing (town female youth).

The importance of aesthetics is a indicator of the utilitarian nature of attitudes toward the environment. In the interviews, utility was gained from pleasure from the presence of wildlife, hunting, or benefit through biocontrol. Ecocentric attitudes were expressed less often.

The town of Viking experienced a water crisis in 2002 in which the water supply was down to using water in the last cell of the town's dugout supply. The quality was so poor that the treatments added to it to make it potable made it pink in color. In spite of this experience, only one agricultural participant made direct reference to water quality as an environmental concern, though not in terms of the town's drinking water. Two other participants, just one of those from town, were concerned about long-term supply in a general sense with particular concern for local implications of regional water drawdowns. None these three people were the individuals who mentioned the water crisis. It would seem that for many people the immediacy of a problem in terms of time and personal impact is what puts it on the radar as a concern.

Another example of disjunctive views within the environmental dimension lies with climate change. The topic was identified directly in five interviews. In two, the Kyoto Accord was raised as both a positive and negative economic factor in oil and agriculture industries. The environmental consequences behind that political document were not addressed. As part of attempting to find out how the concept of community sustainability is constructed, I asked participants if and where the topic was ever discussed. Climate change was mentioned in two interviews as such a topic but not in a detailed fashion and more as an inevitability rather than something that could or should be addressed for community sustainability. A third indicated that it was a recurring topic in the media.

Otherwise, references to climate change were roundabout. Two interviews mentioned that trees were good for absorbing the carbon while three others discussed certain actions that would reduce the use of fossil fuels – only one of three directly indicated that this was an environmental issue due to emissions, otherwise it could just as easily be an economic issue. This is where poor interviewing technique prevented a fuller understanding: I should have probed for the issue behind fossil fuel use. Aside from weak interviewing skills, part of the problem in expressing opinions about the connections between climate change and community sustainability would seem to lie with the fact that it is a controversial issue, and a particular flashpoint in a resource dependent town:

> I think that [maintaining trees and planting more] would help the climate and everything, *which is kind of airy-fairy really* (town male, social, retired, emphasis added. This participant had quite strong and emphatic opinions with regard to the importance of environmental sustainability, making this comment seem out of character).
>
> But it's kind of, in the end, what do you, like believe? (rural female youth).

The fact remains that people's attitudes toward and understanding of environmental issues remains one of the biggest challenges to environmental sustainability.

Social Dimension

From my viewpoint, this is the most complex, and therefore interesting, dimension of sustainability. It is virtually impossible to fully explore social sustainability without bringing in the concepts of sense of place and social capital. Therefore, though each of those concepts will be more fully developed later, they will also appear in this section.

The most straightforward aspect to social sustainability involves access to social services such as health care, senior care, school, RCMP and fire services. The presence of the school was considered an even more important indicator raised in 23 of the 25 interviews. The presence of health care services, including doctors and the hospital, was raised in 19 of the 25 interviews including

VIKING
FIRE HALL

VIKING
HEALTH CENTRE

those with 5 youth, with the quality and good reputation of the health care being emphasized by seven participants.[15] The presence of the hospital and school are not just important for attracting people to live in the community but also for drawing people in from other communities, who may then patronize Viking businesses. Surrounded by smaller communities that had, over time, lost such services, there was a strong awareness of the consequences of such a loss to a community.

> First thing I guess, in terms of sustainable communities, we need healthcare. You take a look at all the communities in the area that have kind of, went by the wayside over the years, I mean, once the community loses things like healthcare, they're kind of on the way out cause people are then going to another community to get that and when they're going there to get that, they're not in your community, they're not buying things (rural male, agriculture).

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> Just hearing what other communities have gone through that have been forced to really think about closing down their school because of population, when the school goes, really the town goes downhill with it. So that's a big deal too. It keeps people coming into town to pick up their kids, to participate in activities and that sort of thing (town female, social).

Six participants also made specific mention of the diminishing school population, including the fact that the graduating class was larger than the incoming kindergarten class. In the summer, the school was anticipating a reduction of 32 fewer students enrolled for the 2007-2008 school year. In September, 2007, the local paper reported that school enrollment was down by eighteen students, representing a loss of $90,000 in funding (Echtay, September 11, 2007). One participant observed that this phenomenon was not unique to Viking school.

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[15] A recent issue in the East Central Health region occurred with the Vegreville hospital being shut down for poor sterilization protocols. As Vegreville is within 45 minutes drive of Viking, I think it remains a touchy subject with people in the area.

> even in I think Camrose, that some of the larger grades have left but fewer kindergarten students are coming in. Numbers are dropping. I don't know. People need to have more babies (expat female, social).

Concern was expressed by six participants about the challenge of keeping doctors and/or keeping the hospital open. Another two identified that the numbers of doctors tends to fluctuate but were not openly concerned by the fact. With the ever present concern over keeping health care going, for some it wasn't just the fact that the community *had* a hospital that was an indicator of sustainability but that it was undergoing an addition.

> They just started a great big renovation addition project on the hospital last week or the week before, so that's a good sign they're keeping our hospital going (rural female, agriculture/social).

Related to the hospital and health care system, and frequently addressed in conjunction with them, was the senior care. Viking has the full range of senior care, from lodge to nursing home. Each institution is built next to the other with the nursing home connected to the hospital. The fact that the community can offer all levels of senior care in conjunction with health care was seen as a positive. Two participants particularly raised the point that with the aging of the baby boomers, seniors are an economic resource to whom a community should consider catering. Again, there was recognition that other small towns couldn't offer those services, so people were obliged to come to Viking. Beyond the economic benefit, however, was the social benefit for locals being able to remain 'at home' in the final years of their lives.

> For a community to survive you have to offer something for every age and there was a waiting list for the lodge and they've done a big expansion on it and it gives them a place where yeah, they've been in this community forever and now they can stay in it forever (rural female, agriculture/social).

A total of six participants mentioned fire and RCMP services; only four mentioned both. Safety was a primary concern with both those services. Other services identified included the library, banks, post office and funeral services. One participant mentioned the presence of the post office in particular as being a "a sign that there's still some good health" (rural male, agriculture) in the community.

Other key aspects of the social element of sustainability, beyond services include opportunities for recreation, clubs and organizations, church, and social centres. Recreation was discussed in 20 interviews. Recreation was equated with sports – golf, curling, skating, soccer, baseball, hockey. Even those who didn't make use of any of the sporting facilities, made specific mention of their importance to the community. The necessity of recreational facilities to the sustainability of the community was particularly prominent as Viking's hockey arena had burnt down two years previously and the new arena multiplex was due to open in August 2007. Having had two hockey seasons in which parents had to go to other towns for all practices, games and tournaments, or remove their children from hockey, significant impacts were felt by the business community and individuals. The dynamic nature of social sustainability was demonstrated through the discussion of this loss, how it affected the entire community and the social life, not just recreational life, of Viking.

> We've had no arena for two hockey seasons now and you ask anyone who's involved in hockey and even the seniors who aren't involved in hockey, how much of a gap there is in our community life right now, traveling out of town, families missing seeing each other throughout the winter because if we have no place, no common place to gather. We play in four separate, four or five separate communities right now and what a relief it's going to be to have our hockey teams next year. For that reason it will build up the community and it's worth the debt we're going into, absolutely it is. I support that a hundred percent, even if it's going to take twenty, twenty-five years to pay off. It's vital. It's vital (rural male, agriculture).

That missing common space, brings us to the next aspect of social sustainability which is the presence of social hubs. For eight participants ranging in age from 13 to 86, the hockey arena was central to the social life of the community. The social aspect of other sporting events was also raised by three participants, as were the community hall, the seniors centre and the coffee shop. Two participants intentionally presented themselves as apart from the coffee shop crowd. One of those saw it as an impediment to sustainability, making the point that he didn't photograph the coffee shop[16] though when his wife suggested that it was important for some, he agreed that "some people have to stitch and bitch" (rural male, agriculture). For three others it was neutral, merely a place for social intercourse.

What these various social hubs provide, then, is a public place for those with common interests to gather, share and develop individual social capital networks. However, it also points to the importance of the quality of the interaction. The "stitch and bitch" group may reflect more of the downward leveling social capital than the networks developed through the arena.

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[16] All his photographs were focused on positives of community sustainability.

Churches are also a social hub. Their presence was identified as "important," "viable," and "vital." They also contribute to community sustainability through voluntarism and addressing social issues in the community.

> That is really key to a community I think, to its sustainability, and in a community where you have churches some of the social issues that are troubling the community, like maybe the food bank, so-and-so's house might have burnt down. Those things come to the forefront of the churches so that they encourage their parishioners to contribute so that helps to maintain the sustainability too (rural male, agriculture).

They are further important in developing the psycho-social dimensions to sense of community.

> That's why religion is so big and churches are so big in small towns, because it's a community event, a thing where people can come together, and belonging, and that's all people want to do. It's universal (rural male, agriculture).

That feeling of belonging is central to community, to being accepted as an insider. In addition to churches, clubs and organizations are central to community sustainability and are so because of that sense of belonging which contributes to the development of social capital and the capacity to sustain the community.

> There's more than just the Ag Society too. There's the Friends of the Viking Carena[17] Society. There's, the Elks, the Kinsmen, the Lions. (P2: It's just all associations, clubs or organizations.) Any time you have organizations like that or groups of people getting together, it provides, you know, fellowship, entertainment, activities for the community to get together to be a community. If those things aren't there, you know, you're living in a community but you're not really part of it. You're in the community and you're living, you're doing your own thing but if you don't really have the sense of working together or doing things together, you're not really part of the community and that's why those kinds of things are very important. Churches, Ag Societies, Lions, Elks, all those kinds of organizations. Those need to be in place to have a

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[17] The Carena is the Viking hockey arena so named because the original arena was built with funds raised through car raffles.

> successful sustainable community (rural agricultural couple, male, P2 female, social).

In the same sense the interdenominational youth group was also identified as key. The fact that all but one of my youth participants was recruited through the youth group likely reflects their focusing in on church and the youth group as important to sustainability, though the other youth participant also mentioned the presence of churches as important. The youth group was identified as a social hub for youth, but also as contributing to the wider community.

Through clubs, associations, churches and organizations the common thread of social capital, sense of place and social sustainability is exposed: volunteering (Figure 5).

> If all these organizations I mentioned like the Ag Society, the Friends of the Carena, the Lions, the Elks, you name it, that's all volunteer stuff and if life in general gets to the point where it's so busy that people can't commit to participating in those kinds of clubs and volunteer committees, it's really going to damage sustainability as well, cause as those clubs go, community spirit goes, you know, and then just things start to snowball downhill from there. That's what I believe (rural male, agriculture).

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> I really feel, like you can work, work, work but if you don't take some time out and volunteer and give something back to the community, yeah, you're not going to have a community left because, I mean it's the volunteering that makes, that keeps us going (rural female, social).

Figure 5. Social capital and volunteering.

So while the necessity of volunteering is recognized, so are the challenges to achieving the necessary levels of volunteering, which creates a challenge to community sustainability. The impediments to volunteering are mainly structural inasmuch as women who previously worked in the home or on the farm are now in the workforce; more people work further from their homes than in years past which takes more time for travel, leaving less for volunteering; and, in some cases, the volunteer positions are increasingly demanding and complex. Furthermore, those that do volunteer eventually burn out and refuse to be involved anymore or people avoid going to meetings for fear of getting a job that they can never leave.

> I think Viking's lucky. They do have a strong volunteer base but I think it's essential for keeping the community going although a lot of jobs within a community that used to be all looked after by volunteers, I think they're becoming, what's the right word? Too intense. That's not the right word. Anyways, they require much more time than used to be required (rural female, agriculture/social).

Though there was a tendency to express that the volunteer base was pretty good, followed by the proviso that it was still a challenge to get people out and that the same ones volunteer for everything[18], one participant who was involved in many areas of the community disputed that view.

> I: *And Viking has a pretty good volunteer base?*
>
> We do, and I mean people talk about it's the same ten volunteers, whatever, the same ten people, but I think too being, just being involved in different groups, every group has sort of got their little core volunteers and a lot of them are very different people as well. So I don't really believe in that same ten people aspect. I think if you get, we, you know, you look at the different groups, like the people that I see say volunteering with curling are different than those that volunteer maybe over at the new rec center, are

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[18] Four participants indicated that the volunteer base was good, but . . . , while another three simply indicated that the same people did everything and there was a need for more volunteers.

> different, completely different than those that volunteer at the teahouse (town female, social).

Although artificially separated in the research questions, sense of place is threaded through discussions of community sustainability. There are important interrelationships between aspects of the social element that frequently reflect sense of place. Take health care for example.

> The doctors are really friendly because usually they know everyone in a small town (rural youth female).

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> We have two tiered health care. Nobody can say we don't. Viking has an amazing hospital. I go there, I get treated like a king. I go to Edmonton and I have to start name dropping, I have to phone up my doctors that I know and everything just to get anything done. Viking, boom its done. It doesn't matter who you are. In Edmonton, no, it's just a population thing (rural male, agriculture).

In fact, health care is used as a central example of sense of place with six participants focusing on the quality, personalized care and/or reduced wait times in the Viking health care system. The positive aspects of Viking health care are compared against those of urban areas.

That social element of sense of place is also integrated into sustainability's economic element. The presence of businesses in the community is important but not solely for economic reasons.

> In a town like this I can go to IGA and buy my food and if I realize I've forgotten my wallet, all I do is take the stuff home and they say well drop by and pay later. I mean it's no, and if I don't make it back right away, if I, you know, if it's a day later, it's like I don't have anybody knocking on my door (rural male, social).

Social sense of place was also highlighted with the school being K to 12. Both youth and adults liked the fact that kids were in the same place throughout their schooling.

> Kids can come here and start school and finish school all in one. I think that's easier. Coming from the city and moving from school to school, I think it, it really does something for a kid's character to stay in one school and have the same friends (town female, social).

Such relationships are also the building blocks for social capital, especially given the realities of relating to other people.

> Like, going to school with 25 people, you might not like 'em all but you have to be friends with them (rural male, agriculture).

It is that kind of experience that develops a person's capacity to bridge networks for the sake of achieving a goal, regardless of personal feelings.

Sense of Place

Sense of place was expressed in a number of ways, though dwelt more upon the social than the physical aspects of place. The one exception was a participant who focused solely on the community outside the town of Viking and had a very strong sense of the natural and human history of place. Of the four other participants who specifically mentioned physical aspects of place, three referred to those aspects characteristic of *other* places, namely that they would like to live near mountains and/or water. However, though one might be drawn to other places, it is not necessarily for lack of a connection with current place.

> And to move to a new place, a beautiful valley in BC with a, you know, running creek and meadows and all kinds of wildlife would be really nice but I don't think there's enough sand in the top of the hourglass for me to become intimate again and that intimacy to the land for me is fulfilling my spiritual side of me, which I can't talk enough about how important that is to me (rural male, agriculture).

For the other, a youth participant who had no experience of living anywhere else, the natural aspects of place were associated with home.

> I like them [natural things] because they add the natural sustainability of the community and they feel like home. Like it just makes it feel right. Like it's the right place. This is my home. This is where I want to be (rural female youth).

Other environmental aspects of place were ecological references to the presence of wildlife. Though wildlife are not unique to Viking, there was particular observation made about the connection between members of the human community and the wild community.

> It was interesting that a little herd of deer could perpetuate conversation for eight months of winter amongst a small group of us that saw them almost daily, if not, every other day and then I noticed that the stories got a little better and better as they winter went on. So from a cultural perspective that little band of deer, that created a lot of entertainment and this road is approaching the highway and this is where I would start to slow down, long before I ever had to slow down for the stop sign, and would just very leisurely take my time and do a little count and see if I could see, you know, somebody that didn't look too well or somebody that was just very plump and healthy that I could go into town and tell about (rural female, services).

Sense of place was conveyed through comparisons that generally favoured Viking to other places. Smaller satellite communities were noted to have no services or fewer than those available in the Viking community. Thus

Viking was positively viewed as a hub for services, notably health care and schooling; the elevator, and some consumer goods. It was also described as having greater social capacity than other local communities, more than would be expected in a small community, which was crucial to their rebuilding of the arena, an extensive and complicated project.

Viking was also compared favourably with urban centres. With the exception of a common complaint of a lack of locally available consumer goods and entertainment, comparisons were weighted in favour of the small town over the city. Cities were characterized as impersonal and places of crime, crowdedness, and busy-ness, while the small town of Viking was described as somewhere safe, quiet, clean, friendly, caring and polite. It had a slower pace of life and was a place where a person has an identity.

> In a small community like this you are not a number. You are a name, okay? You are a somebody (rural male, social).

A great deal of attachment in the participants sense of place comes from social relationships. It is important that people care for each other.

> But here people care enough to find out like are you sick or are you, you know. They kind of look out for you. Yeah. I know everybody's into everybody else's business but you know what? I don't think most of the time it's not malicious and it's more caring and stuff (rural female, social).

The fact that 'everybody knows everybody' was frequently noted but this was not generally seen as a negative. Youth found comfort in knowing everyone as there was a wide safety net, should they ever need help.

In the main part, people were seen as being the community, a further emphasis that sense of place in the Viking community is socially based.

> The connection that the people share is one of the things that keeps everybody here. Yeah (town female youth).

> I'd like to have taken pictures of people because to me community is people, you know, and the old people, the young people, they all just add to the diversity and the complexity of a community and you can't have a community without people, you know, and people working together, you know (rural male, agriculture).

These connections were also identified as important for doing business and the creation of a food economy in which the producer and the consumer know each other.

Some of the connections that create sense of place are related to personal history in a place. Of the rural participants, twelve were second generation or more, or married to those with multiple generation connections to the land and community. These attachments were both anchors and magnets; anchors in the sense that even if the community became less appealing, leaving the ancestral home was not an option. They were magnets in the sense that for those who had left for education, they wanted to return 'home' to farm and have families. They were also magnets in terms of identity.

> I love the fact that I'm fourth generation, I've been on the land this long, my kids have a chance to keep it going. Yeah, like it's nice to know that you have that tie. It goes back to that feeling of wanting to feel belonging and knowing where you're from and the ties that bind, eh. Viking is that way (rural male, agriculture).

Family connections within the community were also identified as reasons for remaining there or returning. For others "it really sucks not to have it [local family]" (town female youth) as they felt somewhat as outsiders in a place that was "not very easy to fit into. Mostly because everyone else is related" (rural male youth).

The negatives of everyone being connected and knowing each other was also identified in the difficulties new people sometimes had integrating into the community, an experience noted by two participants who were incomers to the community. Two other participants who were newest to the community, noted that they had no problem fitting in. It was also recognized by those with long term connection to the community that being new could be challenging.

> I have heard from new people saying that it's very difficult to break into the, you know what I'm going to say, the familiarity and the, you know, those bonds that have taken generations to build. You just don't break into them and you just don't abandon them. You know what I mean? You know, so it's certainly a challenge. It's certainly a challenge for new people to come in (rural male, agriculture).

Related to new people integrating into community is a changing sense of place due to an influx of 'others' of lower socio-economic status. Two participants expressed a change in their sense of place due to these incomers. Two others, while not feeling a changed sense of place, were concerned that the community needed find a way to integrate newcomers of lower socio-economic status lest the sense of community, and social capital, for which they considered Viking notable, be lost.

> Somehow we have to find a way to incorporate, to bring people into our vision of what out town is and I don't know fully how to do that (town male, social)

Pride was a concept that was raised in ten interviews and contributes to sense of place. Pride in the community was made in reference to its sports history – being the home of the Sutters[19] – and the sense of accomplishment in building the new arena. Pride was mentioned in reference to unique products, like Viking wieners, to the community and cultural heritage and to being a

Figure 6. Community pride on display on the highway.

Communities in Bloom winner. Those points of pride are demonstrated to outsiders via the town sign (Figure 6). Pride was expressed at a personal level in farming ancestral land, and in caring for the community and maintaining it. It was one of the immeasureables of community sustainability.

> There are many immeasurables and they go back to pride, they go back to caring about my community. They go back to the fact that I want my town to look nice so I mow my lawn or I plant the flowers or whatever (town male, social).

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> Oh really important to be like proud of where you're from as long as all these, all the kids, if they're proud of where they're from then that means that maybe sometime they'll come back and their, you know, their families are proud of living in Viking, it means they don't want to leave kind of thing, so it definitely sustains it in a way (town female youth).

Some of the older youth who are looking at the next stages of their lives saw the community as 'dying.' They felt that their cohort was focused on life outside the community: "I'm never going to come back here cause there's nothing for me here (rural female youth)." Conversely, those who have lived in the community for a while see it as a progressive town, a place where most

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[19] A family heavily involved in the NHL.

needs can be met, yet sufficiently well located that in the event that needs can't be met in town, they are easily accessible elsewhere.

Social Capital

> To me what that [community sustainability] means is groups of people working together towards common goals and common efforts in order for everyone's benefit. It's for their social benefit. It's for their economic benefit. It's for what the basics of what you need, your food, your shelter, your water, that kind of thing. It's people working together amongst themselves to support each other and achieve what they want to achieve (rural female, agriculture/social).

Social capital "is created from the myriad of everyday interactions between people. It is not located within the individual person or within the social structure, but in the space between people. It is not the property of the organisation, the market or the state, though all can engage in its production" (Onyx, 1996). Social capital provides access to resources and is itself is necessary for collective action. There is evidence of strong social capital in the community of Viking.

> You look at a community like that, like this where we help one another and volunteers will sit on three, four, five different organizations to make the community operate (town male, industry).

With social relationships central to sense of place, social capital and sense of place are tightly intermingled. Informal social capital is evident in the themes 'caring for each other' and 'caring for community' which emerged from the interviews. Community level social capital is evident in comments like,

> In the small community, if something bad happens, it's everybody's problem kind of thing (rural female youth).

From the viewpoint of an older participant, social capital was still present but less so than in the past. It was also recognized that access to that capital was limited to the members of the network.

> Although I think if there was, you know, a house burnt in Viking or, I think people would still get out but I'm not sure if they would do it as much as they would back in the 50's because I think we've categorized people and if it's one of us, yes (rural male, agriculture).

This points again to the necessity of integrating newcomers lest the community become exclusive groups with no bridging between them.

The public good nature of social capital was evident where the benefit to an individual also accrued to a societal level, and that benefit was recognized by participants. In the case of elder care, an individual suffering Alzheimer's had support not only from their primary caregiver but from the whole community who supported that caregiver.

> People would see my dad and say "are you lost?" "You know I think I am." So they'd take him home. You know in . . . a larger center, they wouldn't know him. Everybody knew Dad so a small community looked after the people that need to be looked after. My dad would've been in a long term care center in Edmonton five years sooner which would've cost society a lot more money (rural male, agriculture).

Another instance of the public good nature of social capital occurred with caring for the aesthetics of the town.

One participant's view also leads to the social control nature of social capital.

> And that, like the kindness throughout the community is that everybody kind of cares for everybody else and even though I don't know like every single person in this town, like I'm still, when I walk down the street I still think of like I'd better not litter because this is Viking, you know, and we don't want to do that to other people and other people that come and there's just like a sense of comfort here in a way (town female youth).

The consequences of everybody knowing each other were as a positive form of social control on youth.

> If you want to be a shithead, it's kinda hard to be a shithead, like, . . . I'm pretty sure you're parents are going to hear about it before you're home. . . It isn't a good thing if you want to get into trouble and try to be anonymous but it is a very good thing if you're a parent. When your kids are out there and there are all these eyes watching. So that was huge for me, growing up in that environment. Definitely kept me on track at times (rural male, agriculture).

Youth themselves noted the existence of this form of social control. It was acknowledged that this control was not always appreciated but those interviewed were not adamantly negative about that aspect of small communities. It was similar for people generally. The acknowledgement was that as long as you had nothing to hide, the fact that everyone knew you and your business wasn't problematic.

The development of this kind of informal social capital that creates closed networks is aided by the integration of age groups. Youth pointed out that with the school being K to grade 12, there is more interaction between students of all ages, some structured, some not. Two youth participants also noted that there was interaction between adults and teens, personally and generally.

> I think teenagers and adults definitely interact here. I mean you can't not cause if you didn't you're not interacting with like half the town, so, yeah, we all interact and parents will like put things together, but then teenagers will kind of drive it, like the recreation. And then like for student council and all those kind of things, like adults will come up with ideas but then it's the teenagers that'll like sign up for it and do it and actually put it kind of into motion (town female youth).

For a participant that originated in another community, the age integration and the involvement of seniors in the community was notable.

> I think there's a good mix, a real good mix, more so than you'd see in, like coming from [an urban setting], more so than you'd see elsewhere. I mean there can be wonderful ladies that are 85, 87 and they're still running this community, you know, and they can be right beside a teenager working right along and then you got your middle aged people right in with them. So, no there is a great mix and that's one of the things that keeps this community going, is the, everybody knows everybody of course (town male, industry).

Churches are a form of formal social capital. Most participants belonged to a church, though some admitted that belonging did not always mean regular attendance. The contributions of church to social capital were mainly in the field of contributing to social issues.

> I think having four churches that I think are very well attended and people are very committed and they volunteer within those churches. That is really key to a community I think, to its sustainability, and in a community where you have churches some of the social issues that are troubling the community, like maybe the food bank, so-and-so's house might have burnt down. Those things come to the forefront of the churches so that they encourage their parishioners to contribute so that helps to maintain the sustainability too (rural male, agriculture).

Most notably in contributing to those social issues was the fact that the churches worked together. Such partnerships were identified in seven interviews which included the support of one another's events to coordinating things like the food bank and youth group. One participant made comment that he'd never seen churches working together before.

Partnerships were seen as important to accessing resources. While it was suggested that partnerships with higher levels of government are important for small communities, no concrete examples of existing partnerships were given, though plenty of ideas for provincial and/or federal government contributions were put forward. Only with Beaver County were actual partnerships identified.

For the town it was important to maintain that partnership as the County has access to greater resources in terms of land and tax base.

Partnerships also occur in an informal sense. It was noted that a good thing that came out of the loss of the arena was the involvement in other communities.

> There were six or seven of us and we went down to Killam and we joined a Killam/Viking team which was really good cause we met a lot of people and became part of their community. Like our senior team went down to Killam and played in Killam and we had Killam fans coming and watching Viking and that was really good, and we supported them because we would go and watch their teams play down there. So it's just kind of a win/win because both teams are drawing from two towns and you're kind of making money on that too, which is good for their facilities that we're using down there. So I think it was a really sad thing but in a way it brought our whole community together and then kind of expanded our community into different ones. So I think that was kind of ironic how that happened. (rural female youth).

The involvement of other communities in sports, seniors activities and so on was important for creating regional community. A similar sharing was going to occur with small communities benefiting from Viking's new multiplex.

> We're going to be doing the same thing this year. Holden already, we, it's pretty much a guarantee that their rink won't be running this year. It wouldn't have ran last year if players from Viking didn't have to go play there. They just, they wouldn't have had enough money to run the rink, plain and simple, and it's very costly to run, so, you know, hopefully we can return that favour now and welcome their children and whatnot to our community to play on our teams next year (rural female, agriculture/social).

The interrelationship of rural communities was noted. This could include bridging social capital

> I mean we talk about rural communities surviving, but it's not just a community. It's the surrounding communities around it. You don't want to lose your Kinsellas and your Holdens and stuff like that. If all those people disappear, where are they going to go? Where, what's going to happen to the closeness of the intermingling of those communities? We rely on each other, not just our own

> community. You don't rely just on Viking, and not to, not to knock Camrose or anything like that but I mean, and those big centers, cause we rely on Camrose. We can't provide everything in our own town and this little town beside us can't and that little town beside us can't, so you have to rely on those bigger centers to have the facilities and the goods and services that you want. You don't want to be going to the even bigger facilities like having to go to Edmonton to get that or having to go to Calgary or wherever. You want to keep your areas, you want to make yourself sustainable and rely on yourselves but you also need to, you know, I mean there will be intermingling amongst us so you have to support those other areas and facilities as well (rural male, agriculture).

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> Like we don't have enough kids often to have a certain team for a certain age group so, okay, well how do we combine with another community to keep this program going? Yeah, so you're constantly working and getting different ideas about how to, you know, keep the programs going but maybe work around different, expand to a larger area or, you know, drawing, yeah (rural female, social).

Like churches, clubs and organizations are also forms of formal social capital. All of these formal types of social capital rely on volunteering. As noted previously such organizations are integral to the sense of place of the community and it is through activity *in* the organizations that make some contribution to sense of place. Such is the conundrum of social capital and sense of place:

> Any time you have organizations like that or groups of people getting together, it provides, you know, fellowship, entertainment, activities for the community to get together to be a community. . . . and if life in general gets to the point where it's so busy that people can't commit to participating in those kinds of clubs and volunteer committees, it's really going to damage sustainability as well, cause as those clubs go, community spirit goes, you know, and then just things start to snowball downhill from there. That's what I believe (rural male, agriculture).

Participants generally believe that Viking has a good volunteer base but also not that there are challenges to ensuring a steady supply of volunteers to keep organizations viable. Aside from the structural issues mentioned earlier, no one could pinpoint precise reasons for reduced voluntarism, though a general sense of increased busy-ness was often cited. Demands on time, as noted from personal experience or observation, included more people working full time and a greater number of activities in which children are involved. Farm women were particularly challenged in finding time to be involved in volunteering, particularly women with young children. For example, one participant acknowledged the value of involvement in the community but "between work and them [toddlers] and our place" (rural female, conventional agriculture/social), the demands on her time made volunteering at that point in her life unrealistic. However, for others volunteering did occur in the realm of their children's activities. All the youth interviewed were involved in at least one sport, with two acknowledging the contributions of parents in that part of their lives. Where one volunteers appeared to be reflective of generational differences in what is valued in the community and/or what is valued at particular points in the life span.

In addition to sports teams and churches, other clubs or organizations in which participants were either involved or which participants considered warranted recognition for action in the community, were 4-H, the youth group, the Station Guild, Communities in Bloom, moms and tots, Elks, Lions, Royal Purple, the Ag Society, Friends of the Viking Carena Society, the Kinsmen, various school committees. Of these organizations, two were important enough to be mentioned multiple times even by those participants who weren't personally involved: youth group and Communities in Bloom. The former contributes to social capital through broadening youth's interconnections and their perceptions and appreciation of community.

> We have the youth group and that's a really good thing cause it, it kind of gets people, a whole bunch of people that wouldn't normally be together just hanging out and you get to meet a whole

> lot more people and you do things for the community and it's just fun without being like work (rural female youth).

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> That youth group is teaching kids to really look at the community and not only at themselves and how you can help the community and how you can help others (rural male, agriculture).

Communities in Bloom was raised in seven interviews, of those five were people not directly involved in the group, but they felt the group's contribution was very important to the community and contributed to sense of place.

> We've won a couple like Communities in Bloom projects and stuff like that and that just kind of shows like the beauty within Viking because that's like who would want to live in a town that's kind of ugly or anything (town female youth).

For maintaining organizations and volunteers and for bridging between networks, key people are important. Eight different people were mentioned by name as being key to some aspect of sustainability or other. Of those eight, three were mentioned in only one interview apiece, one was mentioned in two interviews, two were mentioned in three, another two were discussed in four interviews and one was discussed in eleven interviews. The importance of such people, in general was noted.

> When you see what one person's idea and a group of people working together can do within a community, it's really an amazing thing (rural female, agriculture/social).

Aside from building and bridging networks, bringing resources to sustain a community and providing social control, social capital has one other key function: dissemination of knowledge. Participants' answers varied when asked if and where community sustainability was discussed, and what sources of knowledge about the topic were accessed. For youth, school was the focal point for knowledge about issues of community sustainability. In this setting, participants said that issues tended to be dealt with separately, rather than as an integrated whole, i.e. local economic issues were not integrated with environmental issues. Furthermore, it was indicated that particular teachers were central to raising the awareness of sustainability issues.

> P2: Only with certain teachers will bring it up but (P: Yeah) others, it doesn't ever, but, some teachers have, like our one teacher has discussions on like topics like that and stuff just every week and so just everyone can voice their opinions.
>
> . . . .
>
> *I: Do you think that these are kind of useful discussions?*
>
> P: I think they are. (P2: Uhum, cause it makes you think about things like that that affect your life and stuff.) Uhum, cause otherwise you just kind of, like with other, in classes you just kind of go through it and think about just what's going on with you and not really about how it's affecting everything else (rural female siblings youth).

Other than in classes, older youth suggested that there was some discussion among their peers about limited opportunities in Viking and the desire to leave. Youth stated that the phrase "community sustainability" or even the term "sustainability" was not one that they had encountered before being asked to participate in this project.

Much like the youth participants, the adults found that sustainability discussions tended to revolve around specific issues or organizations. In twelve interviews it was stated that discussions of sustainability were raised on the job or in local government or in groups, organizations, or institutions like the playschool,.

> A lot of it in a small town is sustainability of individual institutions even. . . . there's always these concerns. I'm the treasurer of the playschool and we're doing great financially. . . . but at one point in time, it was always just kind of on the knife's edge whether it was going to survive or not and that mindset is very much there, is can we keep this going? And you see that in a lot of individual things and there's always that worry, can we keep this going? And the cumulative effect is of course can we keep the town going is

> really where the question comes down to. . . .there's that nagging sense in people's minds, I said that financially the playschool doesn't need a fundraiser. Yeah, but we got to build up a reservoir in case some day, and it's always that someday thing. And you see that a lot and I'm trying to convince them you know what? We're doing okay but there's still that nagging thought in the back of people's heads and I see it over and over again (town male, social).

That underlying concern was also noted by a youth participant for whom the topic itself hadn't been something of which she had previously thought.

> I didn't really think about it much but there was always a sense of it, right (town female youth).

People tend to be more accepting of knowledge that comes from those they know and trust. When it came to the subject of community sustainability, nine interviews indicated that aspects of it were a topic of discussion with family and friends. Such discussions could be in search of information or more in a manner of creating knowledge about community sustainability. Topics of discussion ranged from throwing around ideas for community development, business ideas or seeking out information from local people. Trust may be the key to accepting such knowledge. On the other hand, the main reason that most knowledge comes from friends and acquaintances could be that people are aware of them as sources. One participant pointed out that inside the community, he knew who to go to for information about various aspects of sustainability but that he wouldn't know where to go outside the community.

Three participants identified themselves as sources, one in particular was able to identify several concrete examples of knowledge transfer. Those who identified themselves as sources, as well as some of the individuals others listed as sources of information or centres of community sustainability discussion are those whom I have identified as key people within the community. They are leaders, connectors, decision makers, sources of knowledge and influence.

> *I: Do you find that any of these other places that you work and volunteer that sustainability is discussed or addressed?*
>
> It is when I'm present (rural male, agriculture).

Beyond social capital's influence on knowledge/information transfer, books or other media, and education, be that conference speakers, courses or university education were identified in nine interviews as important sources for information about sustainability.

> Because I feel a lot of times that, you know, I didn't think about this stuff before I went to university, as weird as that sounds, you know, and so that tells you the value of a university degree (rural male, agriculture).

The value and importance of knowledge is more fully developed in the next section.

Hegemony, Knowledge and Power, Control

The assessment of degree of hegemonic worldview in conceptualizations of community sustainability is necessary to locate where conceptualizations arise. Given that neither individuals nor communities exist in a vacuum, but in a wider political-economic context, the concepts of hegemony, knowledge, power and control help explain the origin of conceptualizations of sustainability. Considering the hegemony of the economic expansionist worldview throughout much of the world, it was assumed that interviews would reveal a split between those who identified community sustainability along the lines of the original, counter-hegemonic sense in which the discourse of sustainable development was first developed, and those who conceptualized community sustainability in the current form, co-opted by and absorbed into the expansionist hegemony. The reality was rather more complex. First of all it isn't really possible to consider hegemony without the articulation of knowledge and power. Various incarnations of power/knowledge either contribute to the continuance of a particular hegemony or to that of a counter-hegemony. Finally, the picture cannot be completed without the flip side of hegemony, that of coercion and control.

There was no perfect division of interviews into two opposing camps: conceptualizations occurred along a continuum, expressing varying degrees of agreement with hegemonic and counter-hegemonic positions regarding sustainability. In one interview expression of a counter-hegemonic position was evident.

> If we let economies dictate our direction and efficiencies and bureaucracy, you know, with the regionalization of everything, you know, what I mean by bureaucracy, you know, and letting economies decide, you know, our comparative advantage, you know, let the world trade organization, put our faith in that, we'll perish. It's as simple as that. We'll perish (rural male, agriculture).

A larger proportion of the interviews tended to align more with the paradigm of economic expansionism. Such a worldview was particularly evident in their indicators of community sustainability and also in their views of the future of Viking.

> So we want industry to come too and I guess following with industry, one of the best things we still have going for us is the CN Railway still coming through town. Now sometime if a person could take advantage of that down the road, I mean the world is getting global, not just your local area. . . . So, you know, a person's got to start thinking global, you know. Maybe you, you know, think outside the box and think big and write a few letters to China and say we are Viking, we're open for business. We have industrial land here for you. We have CN Rail going to Toronto, Vancouver, wherever you want, if you want to start a business here we sure welcome you, you know. It's, you got to think outside

> the box and really promote stuff like that, you know (town male, industry).

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> I know that it seems like a lot of what I think about is economics and stuff like that but that's what the world is and so that's what I base all my ideas on, how somebody can go forward. Can you go forward for free? Well, that would be nice if you could but chances are it's gonna cost you. So how are you going to get money so you can go forward. . . . So, that's why everything I do is based on money, and how, what's this going to cost me in the future. Even machinery, what's this going to cost me in the future. How am I going to fix it? Can it be fixed? Do I even *want* to fix it? Answer that and away you go. And communities are the same way (rural male, agriculture).

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> We need income coming in from somewhere and it's going to involve some large corporations and being tied into the world economy to a point and as much as we talk about doing things locally, I'm still convinced we need a tie-in to the worldwide economy (town male, social).

Even a participant who generally rejected economic expansionism particularly as played out in agro-industrialization acknowledged that this would not be disappearing any time soon and that the community was benefitting from having the Cargill inland terminal there.

There was evidence at the level of the individual of the hegemony of economic expansionism and its attendant discourse of getting a 'good,' i.e. well-paying, job that permits one to fully indulge in a consumer society, particularly one in which one can consume for the least dollar output possible:

> I think everybody's so focused on just getting your education and getting out because it's, if they really stress almost to get postsecondary education, so it's like well I want a good job, I want to make a lot of money, I'm going to get out of this town. That's what it's kind of like, the attitude of that high school (rural female youth).

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> we can just go to Camrose and get everything for cheap (rural female youth).

Part of the hegemony of economic expansionism is that home and work don't have to be physically proximate. Driving is not only acceptable, its expected, and the implications of this divorce of the two spheres are not seen as detrimental to community sustainability; indeed commuting is something that could contribute to it.

> Like you can still live here, but you can work in Fort McMurray. Right? You don't have to have a job here. Like some, the electrician from Kinsella actually works in, I don't know, Fort McMurray but his whole family, which is like six kids live in Kinsella and he commutes and we're getting the benefit of their family being here cause that's filling up our school. His wife works here so, you know, our lifestyle, they found a place where they feel safe and are getting the things that they need for the family and he in turn has had to travel but, you know, that's our lifestyle again (rural female, social).

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> Why can't we get small towns to be bedroom communities? It's an hour, hour and a half commute. It's a joke. When you talk about Montreal or Toronto where they drive 2 ½ hours for a commute. Now that starts becoming a commute. An hour and a half is just a drive, its not even a commute. So, people are soon going to start to realize that. You see it all the time, people are moving out to the country and they don't want to live in the city. They can not live in the city and they can afford to live out in the country (rural male, agriculture).

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> As long as it keeps expanding and it keeps drawing families in this community where you feel you want to raise your family cause people who are working can always drive (rural female, agriculture/social).

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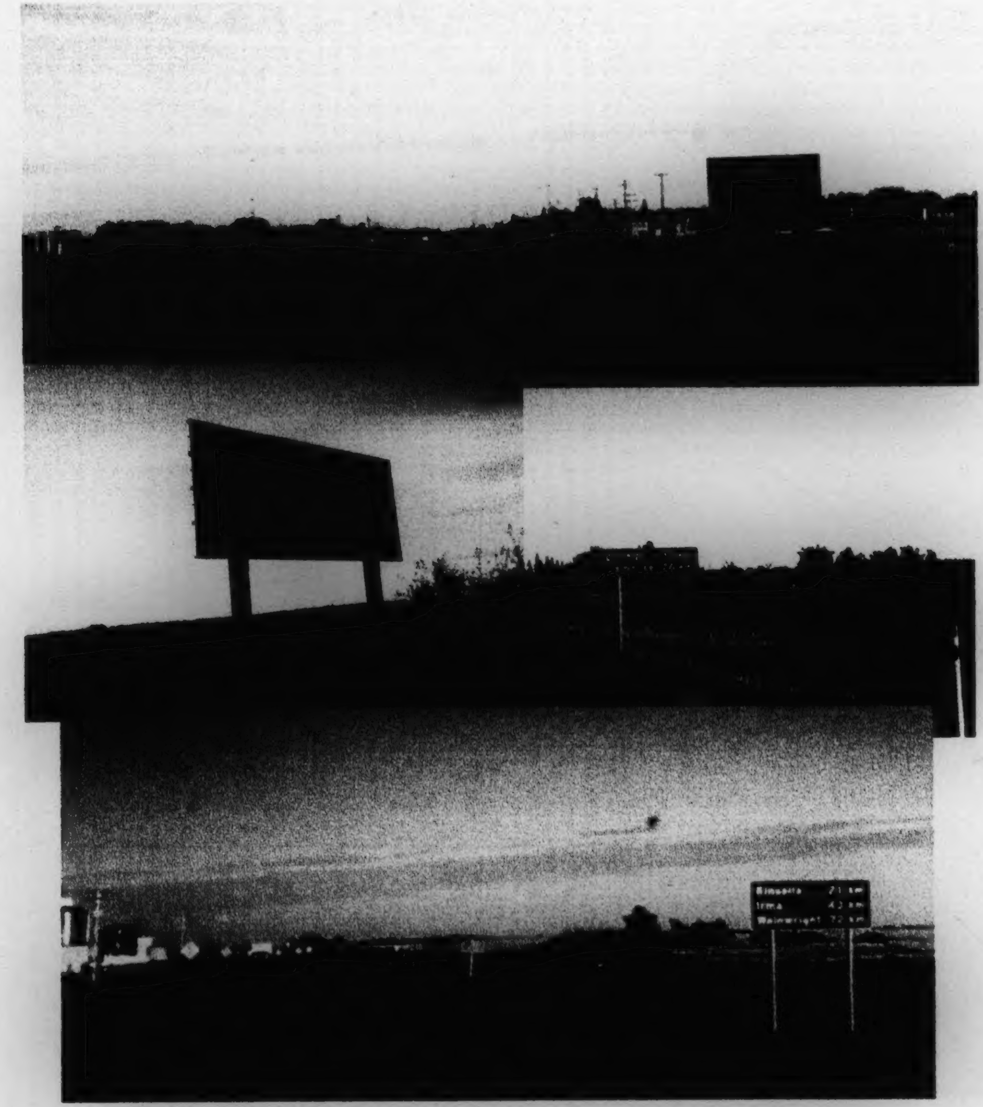
> I took a picture coming from each direction into Viking and that's what those four represent, and my thinking was that we're about three quarters of an hour from Wainwright and from Camrose and I think this day and age our sustainability is affected, cause people travel so much to the bigger centers. Right? And so that's what I was thinking of there. On the other hand with how people, families are moving into rural Alberta, that's kind of a selling point too that

it's, you're, we're close to Edmonton and that sort of thing. So because really, you know, that's not so far. Yeah. So there were sort of two things I was thinking of with that set of pictures, that we're close and so we do lose business because of that but we're also, being close actually does, it does have, be a selling point too, so, yeah (town female, social).



Notably, these suggestions came from those who *didn't* commute far to work. The one interview with the individual who lived out but worked in Viking emphasized a grave dislike for commuting, though it is a dilemma, as, for that person, living in Viking was not seen as desirable either. She also observed that there were significant social challenges associated with working a long distance from home and family, such as for those whose families were local to Viking but were working in Fort McMurray.

Economic expansionism as expressed through agro-industrialization was identified as an element of coercion due to increasing corporate control over products and practices. Such identification was common to both conventional and sustainable farmers. Some felt almost trapped by the system, or at the very least lacking agency to change it.

> But the little guys can't afford the profit margin. There's not enough profit margin to survive, to live and there's probably no more profit margin for the big guys either but they just seem to have, you know, more backing, more, more land, more, you know, like they've got the big machinery and whatever and they need more land to suffice so, I don't know. But farming's going to be tough (rural female, agriculture/social).

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> When Sherritt wants to raise their fertilizer price a hundred dollars a ton, nobody's going to stop them. Whether they're making a $50 profit or a $500 profit, there's nothing that regulates that. I mean these are inputs that you can't go without. You can't go without fuel and still put in your crop (rural female, agriculture/social).

There are those who refuse to participate in that relation of power or see a future where more farmers will opt out of participating in that relation.

> The industry, I think farming in a whole will lean towards going more organic and stuff like that to get away from the high inputs (rural female, agriculture/social).

Related to coercion are issues of control. The biggest issue of control centred on water, and while it was only raised in three interviews, it was done so with great emphasis. Due to the fact that the town of Viking is on the Edmonton water line, interviewees were concerned about the future water supply. Control over other infrastructure was also a concern.

> I'm having trouble with the water issue in this town. I wish we had been able to negotiate in such a way that we could keep control of our water supply that if something happens we could revert back to the way it was because there we had complete control over it and I don't know. I would like to be back to that. I don't know. It's kind of scary to not have control over your own infrastructure and it just plays a role in so many different ways. Okay right now water's not a huge issue this year but it will again and electrical and gas and phones, all that plays a role too. I mean they're all related in some way and we just don't have enough control locally over any of those anymore and we're at the whims of big companies now (town male, social).

Loss of control was also raised with issues of regionalization of schools and health care, such that local communities don't have a say. The ownership of land was the other issue of control, raised by two agricultural participants, in which large farmers acquire land and then have greater control:

> Finally they [small farmers] said the heck with it, sell their land to some big company and they end up working for the company. So they've lost their land and well there's, now that's controlled by the big guy. He just hired the guy that used to own the land to do his work (rural male, agriculture/industry).

The degree to which this actually occurs is unknown.

A further issue in agriculture was concern over the loss of control of seeds due to the rise of genetically modified (GM) seeds and intellectual property rights that prevent a farmer from saving GM seed, such as Monsanto's Round Up Ready canola. Directly connected to that was the fact that such seeds come as part of a whole agroindustrial package including a specific chemical regime which represents multinational agribusiness corporations maintaining control over farmers. That example of control of seed systems is exemplary of power/knowledge, as the multinationals hold the knowledge to produce genetically modified seeds and in doing so can create systems that necessitate the use of their herbicide products, giving them market power. The law also upholds that power with intellectual property rights forbidding farmers to save seeds from genetically modified plants.

Conversely, it is easiest to see the changed power relations mediated by knowledge in sustainable farmers. They rejected the relationships of power in which they did not control the knowledge. For example, one who had adopted no-till as a system that served both environmental and economic goals, ceased to utilize that system due to the realization that

> this is a double-edged sword because all of a sudden I needed to be relying more on chemicals and that scared me and that's what drove me away from it. That and the total control of the grain market by multinational corporations (rural male, agriculture).

Their knowledge came from trial and error and experience. They were willing to access knowledge from outside sources and their knowledge was sought by others, which puts a degree of power in the hands of the sustainable producer.

> The Land Stewardship Center invited me, I was shocked, to come and give some input into strategic planning. There were fourteen people there, five of them have Emerald Awards. There was ministers from the environment, there was the head of Ducks Unlimited was there and here I am just a farmer and they're actually valuing what I say. You know what? That's pretty powerful (rural male, agriculture).

They sought to be examples and consciously identify their role in community sustainability as being role models.

> *I: (reiterating prior discussion) So mostly just the way you live your life and then being, having the capacity or the capability to do things like build your own place and own a piece of land is how you think is the best way to go about achieving, for you, anyway,* (P: For achieving?) *for achieving sustainability?*
>
> Yeah, I think more people should do it. I'm trying to set a good example (rural male, agriculture/ industry).

For some farmers there was a strong expression of the awareness of coercion and the need to change the power relationships in order to salvage the farming community, without which the community of Viking would suffer.

Knowledge and education are pertinent in both developing and maintaining hegemony and in the development of counter-hegemony. While only one participant explicitly connected power with knowledge, the examples of education implicitly demonstrated the avenues through which hegemony is developed and maintained, but, by the same token these are avenues through which counter-hegemony could also arise.

> The connections mostly come actually from my experience at Augustana University. There's no question about that. They opened my eyes and boy there's no turning back, eh, you know, yeah. It really, with power comes great responsibility (rural male, agriculture).

It was through the education of youth that two participants thought the greatest positive change in support of sustainability could come about.

Education was frequently identified with knowledge, though formal education was not the exclusive avenue of knowledge. Experiential knowledge also was acknowledged as contributing to community sustainability by developing understanding of the functioning of community. For example, in two interviews it was suggested that everyone in a community should have a term serving on municipal council in order that there be better understanding of the running of a community.

> I think that every person in a small town should have to take a term on council so they can see what its all about, what they go through. 'Cause you get lots of people who like to yap and not do anything. Or criticize and they've never been there, and until you get down there and see what its all about and its not an easy job, trying to keep things going here (town female, social).

One youth participant also noted that learning from examples presented by adults was a pertinent form of education in the community.

> In a way we learn from our parents from examples that they give us, not from the lectures that they tell us. So I think it's a lot more, they don't have to lecture us on very many things because they just show us by example, you know, and we take that (town female youth).

Implicitly, those participants who sought outside knowledge on the topic of sustainability were those who believed that education, though not necessarily formal education, is important to community sustainability. Education was explicitly identified in two interviews as important to community sustainability. One of those emphasized that an impediment to sustainability was people's refusal to educate themselves. Two interviews exemplified this refusal/disinterest as it pertained to environmental sustainability.

> Yeah you got to do your part with the garbage and the littering and whatever, but as far as air quality and stuff like that, there are specialists who look after that and I know nothing about it so I don't worry about it (town female, social).

While in this statement there is an element of deferring to those with greater understanding of global scale issues, there is also an abrogation of responsibility for knowing one's own role in contributing to both the problem and the solution.

Knowledge also played a role in governance. Local government was identified as key to community sustainability due to it being the closest and most accessible to the citizenry. That accessibility was important to facilitate knowledge transfer and sharing between councilors and the community members.

> Do councilors when they get elected that their position become instantly blessed with all the answers and that tremendously increased amount of knowledge? Nope. So consequently you talk about things at council, some things that you talk about and you have maybe an opinion on, when it gets out into the press and to the public, they'll ask you, like my God, what have you been

> smoking at that meeting that you're not making a lick of sense? So they'll offer some suggestions and then you think my God, why didn't I think of that?! You know? So, no we don't have all the answers by any stretch of the imagination and the more you can involve the public, be it the adult population or the youth, [the better] (town male, retired industry/social).

Lack of knowledge can be a barrier or challenge both in taking a position of power and in changes to the status quo. As the above participant noted, those choosing to get involved in local politics are not suddenly more knowledgeable. It was further noted that positions in government were demanding an ever greater level of intellectual involvement, in terms of understanding various pieces of legislation, than what they did thirty years ago. In terms of changes to the status quo, the hegemony of the economic expansionist system stifles local food production knowledge and farming practices that could be helpful, should that system be suddenly changed.

> My gut tells me that this is the way not only we have to farm but the broader community's going to have to learn to farm this way because that border could be closed in a heartbeat and if it is and we're used to getting produce out of California and we've quit growing the root crops in Alberta so we don't have any root crops here. We don't have anything stored, we're vulnerable (rural male, agriculture).

That lack of knowledge is also a vulnerability, demonstrating a lack of agency due to the hegemony of a particular system.

Local knowledge was raised directly in two interviews and implicitly in two more as key to community sustainability through the generation of ideas and actions. The emphasis on local knowledge could be characterized as counter-hegemonic, as the economic expansionist system is very urban centred with head offices of corporations located in cities. This condition was noted by a participant who stated that "I think everything's just centered in the cities now" (rural female youth). In a comment countering that view, and supporting the notion that projects could be developed and run in rural areas was the statement that:

> We have just as much intelligence out in rural Alberta as they do in the big cities. You move to the big city, you don't all of a sudden become five times smarter (town male, retired industry/social).

The validation of local knowledge is an example of the foundation for agency. Whether a person feels that they have agency in creating community sustainability and how that agency is expressed reflects accepted discourse and people's worldviews. Those with a more counter-hegemonic worldview tended to express their agency in terms of actions supportive of a local food economy and rejecting the corporate control of agriculture while those whose conceptualization of sustainability was more in line with the status quo discussed agency in terms of volunteering. Most often in the interviews, personal agency in contributing to a vision of community sustainability involved social aspects, mostly volunteering and general involvement in activities in the community. A point was made in two interviews that all people have a role in community sustainability by dint of their quotidian routine there. Though that, in and of itself does not necessarily constitute agency, it is an apt observation. Twenty one interviews noted some level of activity in the community. These levels of awareness of involvement in the community as being a contributing role in creating community sustainability range from those who identify their life activities – work, shopping, volunteering, children's activities – to those who say that they have no real involvement "other than visiting" (rural male, social), though they work and do some shopping in town, as established at previous points in the interview.

In terms of legislative control, government involvement was generally considered a positive factor in terms of bringing resources to the community and in giving market control to farmers in agriculture. However, globalization and the hegemony of economic expansionism have done away with those controls.

> There's no government regulation when it comes to any of our inputs or our sales products. There's, they've taken that all away. We had a hog board which was at one time a monopoly, so like the government forced us to get rid of it. I was on the board at the time when they forced us to get rid of it. There's nothing the producers could've done at that time. They're doing it again. I mean you take a look at the wheat board. They've already eliminated barley. It's only a matter of time before they're going to get rid of wheat. It takes away another marketing tool that Canadian farmers have. (P2: To ensure a consistent decent price for your products.) Right. The next one is going to be the quota system. They've been talking about it for years and it's only a matter of time before they get rid of it. The dairy quota's going to be gone, the poultry quota's going to be gone. The egg quota system is going to be gone. Those are the types of systems that farmers, I mean I think farmers almost went to jail in the late '60's to develop that hog board so that we would have prices that were somewhat regulated and under somewhat control, whereas now you are strictly at the mercy of the open market free enterprise system (rural agricultural couple, male, P2: female, social).

Finally, hegemony was seen as a challenge to community sustainability, though that challenge was expressed quite differently. Those with a counter-hegemonic worldview had a conscious vision of what was hegemonic and how that needed changing (i.e. need to remove corporate control of agriculture). One participant raised the idea that the biggest obstacle to community sustainability involved needing a paradigm shift, suggesting a needed change to the nature of economic expansionist hegemony. Another participant pointed to the problem of consent.

> If you keep doing what you've always been doing you're always going to get the same result. And I mean that's what we in Alberta do. Okay? Traditionally we are backwards thinkers (rural male, social).

> It's mentalities. Probably it's just people. People are stupid. We're all stupid. We are. We're all sheep, all cows (rural male, agriculture).

Challenges to Sustainability

The challenges to community sustainability have been identified throughout this chapter and, for the most part were the negatives of those things which contributed positively. To briefly summarize, challenges to the sustainability of the community were: keeping the school open; maintaining a sufficient number of doctors; maintaining a local economy in the face of a mobile population and mega-stores located within easy driving distance; and ensuring local development and recreation so that the community appears an attractive option for living. In terms of ensuring development, the challenge raised was the cost of doing so. In large part, these challenges revolve around maintaining and/or growing the population. The real issue arises with balancing population and services.

> People are always complaining about services, so kind of increase your ability to give services. So that's increase the number of people. It's kind of like chicken or egg, well how do you build a community. You put people in it or do you put services in it and hope people come (rural male, agriculture).

Social challenges included finding volunteers to commit to things in order to keep clubs, etc going. Part of that challenge may lie in the challenge of changing paradigms, in that the current lifestyle based on the hegemony of economic expansionism doesn't allow time for voluntarism and involvement in things like church, associations, and so on.

> I have an old beater that's fine for me and, you know, they got to have all these new vehicles, new toys, so they got to go, go, go to pay for them. I'm not being negative. If that's what they want to do that's fine but yeah, I guess maybe they don't have time to do the simple things and the enjoyable things (rural male, agriculture/industry).

Maintaining a viable family farming community was a challenge, as was integrating newcomers to the community, particularly those in lower socio-economic classes. Part of that comes to acknowledging that a community is *more* than just population.

> Is it still a community if you've just got a bunch of people who are living there cause they can't afford to live anywhere else? Is that a community anymore? Do they get things done? Do they accomplish things? Is there economic viability? I'm not sure there is (town male, social).

In conclusion, several points can be made. First, community sustainability as a phrase may have limited resonance, but people are able to conceptualize a broad and complex understanding of it. Second, participant's conceptualizations of sustainability did involve at least some of the dimensions of sustainability, economic and social being the two dimensions most frequently referred to in the interviews. Third, sense of place does contribute to community sustainability in terms of maintaining population by drawing back or keeping local those people with personal history in the community; in terms of pride which manifests as support for the community; and in terms of a generally positive social atmosphere to which, at least some newcomers, are attracted. Fourth, social capital is present in the community both formally and informally.

The bridging social capital identified was that which links municipal governments and all the church denominations, with the beneficial consequences of economic development and social support. Projects that have arisen from the use of social capital, including the restoration of the train station and the building of the new arena complex, were raised as examples of community sustainability. Fifth, the concept of community sustainability has been subsumed into economic expansionist hegemony to some degree. Knowledge and power, coercion and hegemony all play a role in the expression of community sustainability and the potential for counter-hegemonic expressions thereof.

Chapter Six

DISCUSSION

In this section I will elaborate on how my research fits in the existing body of research on community sustainability, sense of place and social capital. I also further discuss how hegemony, power and knowledge relate to my results. I conclude by looking at areas for further research.

Community Sustainability

Looking at the sustainability literature, it is possible to note commonalities between that body of work and the results of this project. O'Toole *et al.* (2006) in their quantitative survey of perceptions of sustainability found that 29 percent of their respondents had no understanding of the term 'sustainability.' Similarly, in 28 percent of my interviews, the concept of "community sustainability" had not been previously encountered.[20] That percentage represents the entire youth sample, and was more reflective of terminology than of an inability to understand the idea as each interview reflected a consciousness of what was important to community. In the adult sample there was understanding of the term, though many stated that as a topic, sustainability was more frequently addressed in terms of individual institutions or organizations, similar to participants in Conroy (2006). About one third of survey respondents in O'Toole *et al.* (2006) gave a non-specific definition of sustainability, while a third identified at least one of the dimensions of sustainability (economic, environmental, social) in their definitions.

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[20] While I am making numerical comparisons here, it is important to note that these are for interest's sake only as mine was not a random sample.

My participants demonstrated both specific and non-specific elements in their conceptualizations of community sustainability. In my study, towards the end of the interview, I asked how participants would define community sustainability. In those definitions, the actual words of the "dimensions" (economic, environmental, social, political/governance, cultural) rarely appeared. 'Economic' appeared in two interviews and 'social' in only one. However, elements of those dimensions, with the exception of the political/governance and cultural, did appear in definitions. Throughout the interviews 24 percent addressed all five dimensions; and 44 percent of the remaining interviews addressed some aspect of each of the three main dimensions of economic, environmental, and social. What this suggests to me is that requesting a mere definition does not fully explicate the degree to which people do fully conceptualize community sustainability. Thus while quantitative research can cover a broader, and more representative sample of the population, qualitative research of the issue will be more useful in establishing a fuller understanding of community sustainability as conceptualized by the citizens of the community.

There is congruity between my study of rural Alberta and Scott *et al.*'s (2000) study of community sustainability in rural New Zealand. The New Zealand community had lost many of its services, including shops and post office, and was, consequently, very attached to its school for education and as a social gathering point. Though the Viking community has many more services, its citizens also saw the school as a critical institution, more so as an educational centre which draws non-resident population to the community rather than a centre for socializing. However for those youth involved in school sports, some parents mentioned it as a place to meet and socialize.

Involvement in community is generally considered a beneficial thing. A 2002 survey of rural Albertans demonstrated that 92 percent considered community involvement to be important for community development (Sorensen, 2002). When asked to provide reasons for changing levels of involvement in the Ontario rural community of South Huron, Smithers' respondents pointed to household characteristics, particularly the presence of children as key determining factors (Smithers *et al.*, 2004). Involvement was also affected by the respondents' commitment to work on the farm and/or off-farm employment (Smithers *et al.*, 2004). New Zealand farm women were often employed off-farm to subsidize the farm, leaving less time for volunteering. The 2006 Census of Agriculture showed that in Beaver County 55 percent of farmer operators had some off farm work; one quarter of all farmers had full time (greater than 40 hours a week) off farm work (Statistics Canada, 2007c). This is not entirely reflective of farm wives working off-farm, as wives are not always identified as farmer operators in the census. All the farm women I interviewed were also employed off-farm in addition to their work at home. Depending on the age of their children, there was some degree of involvement in the community. One participant in particular noted the difficulty in balancing all the demands on her time. Others also suggested that a lack of volunteers was likely due to women having less time as more of their hours are spent working outside the home than was so in decades past. Viking respondents didn't attribute a lack of involvement collectively or individually to any single cause but time commitments to children and work did come up as a determining factors.

> [my daughter is] involved in basketball so I've been basketball manager for a couple of years. I sit on the board of directors for the FCSS, the Family Community Support Services. Those are kind of my main claims to fame at the moment. I've really withdrawn from a lot of other things just as the kids have gotten

> older and busier and things. I just can't do it all (rural female, agriculture/social)

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> I used to volunteer with youth group and stuff and, so that's all fine but I just, right now I just with my little ones it's too hard. Like between work and them and our place and I do, I somehow got spearheaded into running this soccer but eventually once they're a little more old and involved, I definitely, I like volunteering. I like to help and do what I can. Yeah. So I will one day again, right now I can't. By the time I get a babysitter so I can go volunteer or whatever, it just doesn't make sense (rural female, agriculture/social).

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> Yeah actually, especially the retired people that come in [to volunteer]. It's not, I find it's not the people that are working full time. It's just not. They're too busy (rural female, social).

Yet for all the frustrations of lack of volunteers or lack of members of organizations, this is not a new observation. In a 1963 report of rural Canadian communities, community leaders "talked of what I shall call 'organizational fatigue,' of overwork in community affairs and a sense of frustration and discouragement at the lack of interest shown by the rank and file of the community in the activities offered and the unwillingness of many to assume responsibility to help in new areas where they feel action should be taken" (Sim, 1963 cited in Sim, 1988: 109-110). This at a point in the century that Robert Putnam identified as being most civically inclined, at least in the US (Putnam, 2000). Thus while there is research that contends a decline in social capital, I think it is plausible that it is not as lacking as some may assert.

Ontario farmers, like those in Viking, listed low and variable commodity prices and high input costs as the top two challenges facing agriculture (Smithers *et al.*, 2005). Though agriculture is slowly losing its prominent share of the economy[21], both townspeople and farmers in South Huron County identified the importance of farmers to the Exeter's (population 5,000) economic prosperity. In fact, 7.9 percent more townspeople than farmers considered farmers very important to economic prosperity (Smithers *et al.*, 2005). Farmers and townspeople were about equal (approximately 96 percent) in their estimation that farmers were very to moderately important to the town's social vitality (Smithers *et al.*, 2005). Viking respondents were similarly attuned to the close integration of farm and town, perhaps more so as the town of Viking is substantially smaller than that of Exeter with the consequence that the majority of the children in the school are rural.

As far as a challenge facing small communities in the South Huron region, the growth of one community was seen to come at the expense of other, smaller communities. Though Viking is not a large centre, participants recognize it as a regional hub drawing external residents in for school, health and senior care and, recreation. The draw to recreation is anticipated to increase as older arenas in neighboring towns become too worn our or expensive for those communities to maintain..

A study of rural-town interaction in North Huron County, Ontario (Smithers *et al.,* 2004), showed that the top three community activities in which farm family members were involved were community organizations, sports and church. Involvement varied depending on the farm's placement on the spectrum of growth to decline. Viking community members were similarly involved in those three things, making mention of all with hockey and church generally identified without an interviewer query. South Huron participants found it important to identify with a church congregation, though that didn't necessarily mean regular attendance (Smithers *et al.*, 2004). Of the fifteen interviews mentioning church as important to community sustainability, two also admitted to irregular attendance though belonging was personally important.

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[21] Agriculture and food, inclusive of farm input supply, primary production, food processing, food wholesale/retail and food service only represent 8% of Canadian GDP

In terms of maintaining a local economy, respondents to the North Huron study ranged in their commitment to shopping locally. In support of shopping locally, note was made of shopping where one was known and to ensure the continued existence of local services (Smithers *et al.*, 2004). In a New Zealand rural community that had lost business services, non-aboriginal participants were more upset by the loss of social interaction than the loss of convenience (Scott *et al.*, 2000). This study provided similar findings: two participants specifically mentioned liking shopping where you and your needs were known and another made point of emphasizing that it was important to support local business if you wanted to continue to have the convenience of things supplied locally. The social aspect to the economic life of the community holds up as being as important as the economics alone. In North Huron County, those shopping elsewhere did so on the basis of availability of goods and lower prices (Smithers *et al.*, 2004). Comparable reasons were given from Viking community respondents.

Finally, North Huron respondents noted the importance of locally available employment opportunities in order to support the farm. This was given with the proviso that if the off-farm employment was really good, it could actually impede the sustainability of family farming in the community as youth would choose to simply work, rather than work and farm (Smithers *et al.*, 2004).

(Mitura and Trant, 2006).

Responses from Viking participants were identical. The presence of the oil and gas industry was noted as key to community viability, as it gave farmers well-paid off-farm employment which is used to support farming operations. It seemed likely, however, that young people would choose to work off-farm entirely rather than struggle with having to work in order to pay for farming.

> [With] the oil situation booming and stuff like that, who's going to come back to struggle to make ends meet when they can go out and they can work for huge, huge dollars right now? I mean should that all crash or come back down to a normal state, you might see more people choosing to attempt to come back and try and make it on the farm, but why would you struggle if you don't have to when you're a young person? (rural female, agriculture/social)

Generally speaking, increasing the population of the community of Viking was seen as necessary to community sustainability. An identified challenge to the town's sustainability was the loss of population, particularly youth. A survey of rural Albertans demonstrated that 69 percent of respondents identified a lack of employment opportunities as reasons for youth leaving small communities (Sorensen, 2002). That was also a concern raised in my research, by both youth and adults. Sorensen's (2002) respondents also noted that boredom/lure of the city was a reason for leaving. Four of the youth respondents in this study identified a lack of local recreation/entertainment opportunities as a challenge to the community. For one, however, who planned on moving to the city for the 'singles' life, there was intent to return to raise a family. That, I think, is the key point for community sustainability, not whether youth leave, but whether, after achieving education and experiencing something of the rest of the world, young people return. A casual conversation with an adult community member was telling on this topic. She suggested that there would be nothing more tragic than if Viking's youth never left. It was really important for them to go out in the world and gain a variety of experiences. A more telling point was how many respondents had left for education, worked elsewhere and then returned. Seven of my participants had returned as adults, several indicating that they were not the only ones of their cohort to do so. Youth indicated that once they had reached the point in their lives of raising families that they would prefer to do so in a small town. Thus the main challenge is providing skilled employment opportunities for educated young adults, which would allow for families to live and work in the same place.

In terms of expanding the population there was a sense of selectivity in a few interviews inasmuch as lower socioeconomic status individuals were not considered as contributing to sustainability, a view shared with participants in the New Zealand study (Scott *et al.*, 2000). A greater number of Viking participants did not see the migration of such individuals to the community as an impediment to sustainability but did see the integration of these new people into the community as a challenge. The majority didn't address the topic at all.

What these comparisons to the results of other studies shows is that there is quite a good level of agreement and therefore generalizability of the results of my study to other rural communities, both Canadian and in other Western Countries. This is not to claim that rural communities are homogenous in their views, but rather that certain themes are present regardless of which part of the western world one investigates.

A question that came to me as I interviewed was 'why is the environment not highlighted more?' Sorensen's (2002) survey indicated that 90 percent of rural Albertans consider environmental issues to be important to the quality of life in their communities. Thus it seemed strange that there wasn't a strong emphasis on the environmental dimension of sustainability. It occurred to me that when one is asked to examine community sustainability, the primary consideration is on the presence of the 'community.' Consequently, participants tended to focus first upon that which would maintain and/or grow the population, particularly as up until the 2006 census, population loss had been a reality for the community. As Gertler (1994) noted with regard to sustainable agriculture, "confidence in the future of one's community is necessary so that one can feel that one's own offspring, or other people one cares about, will benefit from good husbandry and environmental stewardship" (p. 73). Perhaps once a population is confident in the continuation of their community, concern would turn to the environment of that community. It may also be reflective of the fact that priority is placed upon those issues which are most immediate. As population loss, and subsequent potential service loss, was being experienced, that was the central issue to community sustainability. Had the community been facing a significant environmental issue, perhaps the environment would have figured more highly in the interviews. There also may be a disinclination to raise those problems to which one's livelihood is contributing.

> I think just the nature of it because it's agriculture and oil, it's like the farmers are out spraying chemical and yeah, not a lot of that is mentioned probably (town female, social)

Effects of Globalization on Community Sustainability

Sumner (2001) identified seven economic impacts of corporate globalization on rural communities: agro-industrialization; poverty and debt creation; restructuring; deregulation; privatization; changes in employment patterns; and commodification/consumption. In my research, primarily agricultural participants identified the challenges of agro-industrialization as being a fundamental challenge to community sustainability. Restructuring was also indirectly identified as a problem, mainly for other communities as they had slowly lost services like schools. In the Viking community restructuring appeared as an issue of control with regard to regionalization of school and health care boards. Deregulation was identified in the agriculture sector in one interview pointing to the vulnerability of farmers with the loss of the marketing boards that had ensured farmers fair prices for their commodities. Privatization was not directly identified as a challenge to the community, but the fact of that the town's water was sourced from Edmonton and the cost of that water was identified as such. The cost comes down to privatization, not of the water itself, but of the line in which it is transported.

Changes to employment patterns, were again most noted in the agricultural community, in terms of farmers having to work off farm to ensure the family's survival. However, it was noted more generally when addressing the issue of volunteering, that fewer people have time for it and the assumption was that it was due to the fact that there were more families in which both husband and wife worked. Furthermore, it was suggested that communities should capitalize on changed employment patterns and encourage people to live there and commute elsewhere for work, as far away as Fort McMurray.

The final economic impact of commodification/consumption, which Sumner identifies as a problem due to the commodification of rurality, was not identified as a problem in this study. What is interesting is that tourism around rurality and heritage was suggested as a potential solution for ensuring community sustainability. I believe that this is due to the promotion of rural tourism by government, without fully understanding, or at least without explicating to those who will be impacted, what the impacts of such development may be.

Sumner (2001, citing Cloke, 1989) noted that the social impacts of globalization can range from increased social cohesion and working together for mutual solutions, to an abandonment of local businesses and services for cheaper urban options. They also identify out-migration as an impact. Of the social impacts of globalization, Viking participants did not identify an increased social cohesion, though that could be down to the fact that they were not asked to assess changes in that aspect of community. One did make a comparative statement, asserting that there was greater cohesion in Viking than in another nearby town. Participants did identify the fact that social relations were important to community sustainability and also noted the importance of working together. On the negative side, participants noted the challenge of maintaining local businesses in the face of cheaper urban options, and confessed to looking to those cheaper options in spite of knowing how it affected the local economy. Participants raised the concern of youth out-migration with the exodus of young people for further education not balanced by a return of young adults to live and work in the community.

Social Capital

Looking at the social capital literature, I find a number of congruencies with my research. Glaeser (2001) noted that those with higher education and those in social occupations would invest more in social capital. The fact that my participants seemed to express a high level of community social capital may reflect the fact that many of them had education beyond high school and many of the adults were employed in social occupations, including health care and education. Rothwell and Turcotte (2006) similarly noted that volunteers in

Canadian society tended to be well educated, but that in rural areas those with less education were more likely to be civically engaged than their urban counterparts. Though this project made no comparisons with other communities, it is true that most participants were involved in the community in more ways than merely working, shopping and carrying on daily personal lives.

Onyx *et al.* (2005) have argued that the development of social capital requires agency. I think it more that the reverse is true: agency requires social capital, not in its formation but in action. Each Viking respondent felt that they had agency in contributing to a sustainable community, predominantly through volunteering. Yet, the big Carena project required more than a sense of agency, it was necessary to draw upon all the resources available in the community through social capital to achieve a positive outcome. Brennan and Luloff (2007) have noted that routine and nonrequired social interaction was the most important factor contributing to community agency. That is to suggest that the relationships and trust of social capital permits community agency.

At the individual level, Maser (1997) also highlights the importance of agency in that people play a role in sustainability both as activists and as examples. Three of my participants explicitly identified their role in community sustainability as providing examples; two were explicit about being activists for sustainability and community while another suggested that his position permitted him to be influential in community sustainability issues. Of the youth, one stated that learning from adults occurred through example, another indicated that how a person was raised was important, implying that examples set by the adult population are noticed.

For community level social capital to occur, it is necessary for individuals to identify themselves as a community. The City-Identity-Sustainability network theory assumes that social identity as a community is necessary for sustainability (Pol, 2002) and research in various cities around the world demonstrated that sustainability covaries with social identity, which includes cohesion and identity (Pol and Castrechini, 2002). Similarly, Maser (1997) suggested five purposes to local community, four of which are related to social cohesion and identity. Though my study was not in an urban centre, one would presume that social identity would be equally important to sustainability. In the Viking community, there was a strong sense of community cohesiveness and identity with the community, even in those youth who did not see themselves returning to the community.

One might expect that having extended family in the community would contribute to a sense of community and social identity thereof. However, people with local relatives (Goudy, 1990) or lengthy residence (Kisko and Murray, 1994) in a community have been noted to have less involvement in local affairs. Conversely, Brennan and Luloff (2007) found that family interaction was a factor in community agency. Similarly, I found that though most of my participants were locally connected and long time residents, they weren't any less involved or interested than those with shorter temporal connection to the community. Furthermore, as the Viking community was characterized by participants as one in which everyone is related, but also as a community that "gets things done" it is fair to suggest that length of residence or the presence of family isn't necessarily related to level of involvement.

In the City-Identity-Sustainability network research, it was found that where there was high level of socioeconomic conditions and a good quality of life, cooperation only occurred in response to a specific problem (Pol and Castrechini, 2002). As Viking is a small community frequently facing challenges to maintaining services or organizations, cooperation would likely occur frequently. For example, working together to deal with the loss of the arena was noted by all participants. Furthermore, while Viking isn't a poor community, participants identified its members as less monetarily wealthy than a neighbouring community. Thus, it was suggested that people were more accepting of each other and of new ideas. The example given was of a "Sustainability Symposium" held in Viking in April, 2007. It was reasonably well-attended and the respondent suggested that had it been held in another, wealthier community, it would not have been as well received.

Luther (1990) listed 20 characteristics of successful rural communities, five of which involve social capital and which were identified as present in the Viking community: (1) community pride; (2) investment in the future; (3) support for education; (4) seeking help beyond the community; and (5) a do-it-yourself attitude. Of the above, pride was the most commonly cited characteristic of the community. The self-help attitude was also present: "you have to look after your own community because nobody else will, you know." (rural male, agriculture). A corollary to that attitude was noted in another interview: the fact that ideas are good but that people are necessary to implement them.

Roseland (1999) describes the resources for social capital as:

> trust, imagination, the relations between individuals and groups, and time, the literal currency of life. Many of the social issues that people relate to most intimately – family, neighbourhood, community, decompression from work, recreation, culture, etc. – depend on these resources at least as much as on money. This is not to say that economic security isn't important – it is – but focusing solely on money to provide security is using nineteenth century thinking to address twenty-first century challenges (p. 204).

These were resources identified both implicitly and explicitly throughout the interview process. Trust was implicit, with the exception of one interview in which a youth indicated that there was a good level of trust between youth and adults, the word was never used. I did not make specific query about if and how much people trusted each other. That came through in participants' comments regarding feeling safe in the community and knowing everybody. Undoubtedly knowing everybody doesn't necessarily make them trustworthy, but one is more likely to trust known individuals and knowing which people are not as trustworthy is also part of feeling comfortable in a community.

Relations between individuals were more explicit, with venues providing opportunities for those relationships to develop, being places where people meet and talk, share, essentially 'decompress'. Time was something of a challenge. Many interviews indicated that people lacked time but two made particular note of blaming television and computers for people's lack of time and lack of commitment to community, a factor also identified by Putnam (2000) as causing a reduction in social capital.

Sense of Place

Viking interviews demonstrated that sense of place was frequently established in comparison to urban areas. This comparative tendency has been noted in Hummon's (1990) investigation of community ideology. Jones (1995) found that conceptions of the rural – and when asking someone in a rural area what they conceive to be rural, is essentially to ask them to describe their sense of place – are similarly established through comparison. Such comparisons tend to be normative in that the small town or rural place is positively described as a clean, quiet, safe, caring place with the city being its negative. Turcotte (2005) found that Canadian rural residents are likely to have a strong sense of belonging to their local community.

Belk (1992) has noted that collective possessions in the form of buildings or monuments provide a source of identity and attachment to place. Such is seen from Viking participants, seven of whom raise the restored train station as indicative of community sustainability. The new Carena (Figure 7) is also such a possession inasmuch as it is representative of the hockey history of the community, being the home of the NHL's Sutter brothers and, as such, is an enormous source of identity and pride. Both places are reflective of the importance of "places to enact community" (Stewart *et al.*, 2004, p. 325). Such are places which Stewart *et al.*'s participants felt were important to their sense of community, places where they could gather, share, work toward common goals. The restoration of the train station was a collective project and remains collective in that it is the centre of Viking's art community. The arena complex is just as, if not more, important for socializing, as it is for playing hockey. Churches also come into this category, explicitly identified as important in contributing to people's sense of belonging.

Figure 7. The new Carena Complex, collective possession

Attachment in Viking also occurs through genealogical links, economic links through ownership and cosmological links through cultural events, as per three of Altman and Low's (1992) types of place attachment. Hay (1998) notes that residential status – i.e. land ownership, length in community, and whether born locally – and social belonging are key to increasing sense of place. Though ownership status was not established in this research project, strongest sense of place in Viking participants appeared in those who were born in the community and/or were multigenerational. Those with all three variables – all but one of whom were farmers – were anchored in place, those who were longer term residents and had a positive sense of social community also were anchored in terms of wanting to retire in Viking. Those with the shortest connection were still quite attached socially but indicated that they could live elsewhere, preferable closer to Edmonton, though they were happy enough in place to have no current plans to leave.

Ambard (2004) suggested, in his investigation of sense of place in Hinton and Jasper, Alberta, that a balance of physical, social and recreational components of place were crucial, evidenced by the fact that participants with "great home[s], that they were strongly attached to, good jobs, incredible physical surroundings, and the best recreational opportunities they had ever known " (Ambard, 2004, p. 107) were sufficiently lacking in social attachment that they were willing to leave. To Ambard, this suggested that balance was necessary. I would contend otherwise. I think that social attachment is primary, if not primal. This argument is supported by the fact that Viking participants, for the most part, did not express a strong attachment to physical place. With the exception of one participant who expressed a spiritual connection to his place, those participants mentioning physical place tended to wax eloquent about *other* places, namely mountains. For one who mentioned that a dream would be to move to the mountains, he stated that realistically family would hold him in place. For a more recent incomer, the attraction was not the physical place but the social.

> I mean the beautiful landscape of the area doesn't keep you here, it's probably the people (male, industry).

For those who returned, most had a physical attachment in the form of a family farm to which to return, but they also emphasized their social relationships in the community. Furthermore, attachment to a family farm still interprets physical attachment through social language. Thus I would contend that the social comes first in place attachment.

Crisis, or threat to a place, has been shown to galvanize a sense of place (Hiss, 1990). Leaving a place also clarifies a sense of that place, something noted in particular in two interviews, one with a participant who returned as an adult because she wanted "to come home" to raise a family and one with a youth participant who had been gone several weeks on an exchange and who noted that experience showed her that you don't know your community until you leave it. It takes similar threat to compel changed thinking and action that promotes greater sustainability (James and Lahti, 2004). Essentially, only when the dominant worldview loses its hegemony, through some kind of crisis of legitimacy will a counter-hegemonic worldview have the opportunity to gain dominance. At that point the ongoing dynamism that is integral to knowledge and hegemony would reveal another counter-hegemony to challenge the new one.

Hegemony

Sumner (2005) indicates that sustainable development is that which builds the civil commons, a process which rests upon "the three building blocks of dialogue, counter-hegemony, and life values" (p. 117). The necessity for counter-hegemony to achieve sustainability is due to the fact that with the concept being co-opted by economic expansionism, 'sustainable solutions' tend to support that worldview. While there may be many solutions, it will be the ones supporting the economic expansionist worldview that will get general support from government and industry. For example, Hall (1998) points to the fact that no-till was developed as the solution or best management practice for environmentally sustainable farming, rather than other options, as that solution sustained the dominance of agri-business and economics as key, rather than environment. That is to say that farmers who made the extensive capital investment for no-till seeding equipment did so as this production method was economic and would increase production.

> Once established, the promotion of sustainable solutions such as no-till serves to reinforce the neoliberal ideology that business and market forces, if left on their own, can achieve this dual function of promoting ideas and practices to meet restructuring objectives while promoting environmentally safe practices. Thus, agribusiness is able to promote itself as 'green', while extending its capacity to control the market and discipline the direct food producers (Hall, 1998, p. 21).

Hall's observation continues to hold true, as demonstrated in two interviews, one of which acknowledged and rejected agribusiness control, the other of which accepts the hegemony of that form of production.

> all of a sudden I needed to be relying more on chemicals and that scared me and that's what drove me away from it. That and the total control of the grain market by multinational corporations. (rural male, agriculture/social)

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> Most farmers around here have tried, are not doing the summer fallow anymore. They're actually doing the, what do you call it? The direct till, you know, yeah, direct seeding and it has definitely made a big difference in erosion cause when we first came back in 1980, like we just watched our soil drift into the next door neighbour's but since they've switched to that, the farming methods are improving. They're quite up on new methods and trying new methods (rural female, social)

An excellent example of a hegemonic solution to community sustainability was presented by my participants. Maser (1997) suggests developing the local economy, which better integrates social, economic and environmental dimensions of sustainatibility, rather than catering to the global economy. He cites Gandhi saying, "Bring work to the people and not people to the work." (p. 187). This kind of counter-hegemony was not demonstrated in my interviews. Many participants would encourage the development of a bedroom community with residents that commute to work and the development of rapid transit that could take workers to Edmonton for work. In a casual conversation about industrial development, a community member stated that every so often a single small industry tries to set up and it fails. The comment made regarding this style of development was, "'If you build it they will come' only works in the movies." Hence support for taking workers to jobs elsewhere. This reflects Morton's (2007) discussion of Gramsci's views on the rationalization of production systems, that production is internalized and "inseparable from a specific mode of living and of thinking and feeling life" (Gramsci, 1971, p.302). In spite of the fact that the knowledge economy is expanding, this observation remains true. Production or work is seen to occur at nodes, typically urban – Edmonton, Calgary, Fort McMurray. The good life of quiet, safe, caring neighborhoods occurs outside those places. Both of these notions have been so completely internalized that shuttling back and forth between the two is accepted and promoted.

Others did see local jobs as key and that industrial development was the means to developing those local jobs, and in order to attract industry there would have to be tax breaks or other incentives. However, it wasn't made apparent whether or not the quality of the jobs accompanying industrial development would be a critical concern.

With the exception of sustainable farmers and concern about long term water supply for the town, the question of ecological limits, which, as noted in the literature review, is considered the counter-hegemonic basis for sustainable development, was not addressed by participants. What this suggests is that community sustainability was defined more in terms of the traditional discourse on community economic development, which does not significantly challenge the status quo, a fact supported by a study that investigated how those in an area of rural Australia defined rural development (Eversole and Martin, 2006). They found that development frequently was referred to through indicators "such as jobs, income into the region, industry diversification, and an expanded population base" (p. 694), indicators that matched those that my interviews raised as key to sustaining community.

A worldview becomes hegemonic because it occurs on a scale much greater than community. Hegemony is not merely a product of the state, though it supports the leadership of the state. It develops and is disseminated through the organs of political and civil society, yet is rarely so complete that there is not room for dissent (Bocock, 1986; Gramsci, 1971). That dissent occurred with the origination of the counter-hegemonic discourse of sustainable development. Unfortunately, the oppositional nature of sustainable development was "particularly weakened by absorbing or co-opting the active elements of opposition" (Morton, 2007). Hence sustainable development became sustainable growth and though the original conception remains as an alternative discourse, it became fragmented. Such was displayed in my interviews in which community sustainability was not a cohesive concept, but displayed elements both reflecting and rejecting economic expansionist hegemony.

And yet this hegemony is continually alienating to subaltern groups whose lived experience is at odds with the prevailing worldview that economic expansionism improves our lives. Generally subaltern groups would include those dominated – women, minorities of any variety, poor people – and one wouldn't generally think of economically comfortable, majority race people as being subaltern but expressions of subalternity, of alienation in the face of economic expansionism, of fragmentation in the face of dominant forces were present in the interviews. It came through from farmers who are given endless government 'income support programs' on the one hand while the marketing boards that ensured a fair price for products are dismantled on the other in order to remove impediments to the "free" market. Though farming operations have become increasingly corporatized and efficient in terms of labour and production, they are not protected from the creation of near monopolies and monopsonies, like other business sectors would be. Commenting on Viterra, the merged Agricore United and the Saskatchewan Wheat Pool, and playing on the similarity between the corporation's name and that of Viagra, a farmer suggested their tagline be, "We'll get your crop up but somebody is going to get screwed."

Thus the well-being that is supposed to occur with free market enterprise, having implemented production efficiencies, is failing to appear. Most farmers work harder and harder for less and less. Even large farmers have joined their small and medium farm counterparts in obtaining more than half their income from off-farm sources.[22] Their experiences are very much at odds with the hegemonic worldview. Even those who have gotten big, are getting out and drawing in off-farm income.[23] Consequently some participants espouse conflicting notions, both counter-hegemonic in lifestyle and philosophy yet hegemonic in emphasizing that learning to work in the markets, with hedging, etc is the best strategy for getting ahead. Others have completely rejected the contradictions by turning to organic production and direct marketing to consumers.

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[22] Large farms are those with annual revenues from $100,000 to $499,999 (Statistics Canada, 2005). Off-farm income is inclusive of employment income, investments,

Discourse, Power and Knowledge

Hegemony of a certain worldview occurs due to the participation and promulgation of that worldview through civil society. Such promulgation occurs through a variety of discourses and mechanisms of power which are frequently more subtle and diffuse than oppression, repression and coercion. As such it is very difficult to develop a fully counter-hegemonic conception of community sustainability. Take, for example, the hospital. Nearly every participant pointed to the presence of the hospital as critical to the sustainability of the community. On the surface this seems logical, it is important to have easy access to health care in the event of illness or accident. In one instance, Viking was identified as a very "health-oriented" community due to all the various health services offered there. But the hospital is not indicative of health, it is indicative of illness. It is indicative of a reductionist, consequential discourse and knowledge that supports the economic expansionist worldview. Health care is something that treats

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pensions, and government program payments.

[23] Without research on reasons for off-farm income, one can't know if it is need that is driving off-farm employment for large farms or if it is desire on the part of a spouse to work off-farm.

consequences, seeking expensive pharmaceutical cure rather than prevention. It is noteworthy that those with the most counter-hegemonic worldview also looked at health from the point of prevention. They didn't deny the importance of having a hospital, in the event that prevention was insufficient, but the hospital was viewed as 'plan B' for health care.

> You know it represents a lot more than even just the hospital because a healthy community means more than just a place to go when you're sick. It means to me not getting sick if you, you know, how are we treating our environment, our food, our farmers, you know, and how does that affect our health? How does that affect our, you know, depression, you know, when the agricultural situation is in such dire need of an overhaul where farmers are feeling depressed all the time. That's sick health, you know, so I'd like to have a hospital but I'd like to see it empty (rural male, agriculture/social).

Another two interviews had a broader and more preventative view of health, noting the importance of recreation for physical and spiritual health. The new arena complex, which has a walking track and a planned weight room, was a notable facility.

> If your community is using the facility for recreation and health, it eases your healthcare facilities and your medical use things. Like they're all integrated and intermingled amongst each other (rural female, agriculture/social).

Foucault (1980[1976]) raised the issue of the dominance of scientific knowledge and that those knowledges that do not meet the criteria of scientific knowledge are subjugated. Scientific discourse is that which is accepted as true (Foucault, 2003 [1976]). My interviews, particularly with those with a counter-hegemonic worldview, present evidence of subjugated knowledge, and an acknowledgement of that fact.

> I'll fail at several things and I'll succeed at several more and, but I think all of it offers a learning opportunity for me and for those who are watching, you know, because every time you try something

> new in a community this size, everyone watches. Everyone watches, when I started direct seeding, I stopped traffic when I was seeding into stubble. Farmers would stop on the highway and say what is he doing? . . . When I seeded the strawberries, you know, and said I was going to do it organically and it all came up with weeds, but everybody was watching with fascination. Now what is this nut going to do next? (rural male, agriculture/social).

The reference to the fact that others see him as crazy is evidence of the fact that his knowledge, put into practice, is not a knowledge fully accepted as true. However, the fact that people were watching and that traffic stopped rather than accelerated, suggests that there was not outright dismissal but a willingness, however dubious, to see what happened. As long as that watching occurs, there is potential for learning and the evolution of knowledge. There were also those who noted that with regard to farming organically, knowledge that had been present in previous generations had been lost and/or subjugated with the advent of technology. The knowledge passed to the current generation of farmers is technology focused:

> the way, the last generation has been brought up, no one's been taught that [how to farm without inorganic inputs]. You know what I mean? I was raised with chemicals and fertilizers and soil testing and blah blah blah, whereas, and if you get a problem no matter what it is, you spray it with something (rural male, agriculture).

Stirling (2001) made similar argument regarding the de-skilling of farm work, that the knowledge and capacity for self-sufficiency has been eroded to the point that even repairs to machinery can't be done by the farmer as it requires computer knowledge. Even the knowledge involved in addressing problems through the application of herbicides, pesticides, and so on is not completely possessed by the farmer. Agri-business is continually upgrading, manufacturing, improving their lines of pesticides such that consultation with a chemical rep is almost necessary to know what to apply, when and whether or not it may be applied in conjunction with another chemical without sacrificing the efficacy of either or producing an unwanted interaction. Beyond agronomic consultation, there is the provision of complete seed and input packages, or systems: "The Roundup Ready canola system delivers: cost effective weed control versus other canola system herbicide options; higher yields resulting from more effective weed control; and cleaner fields the following year" (Monsanto, 2007, p.4). Agronomic consultation used to be provided by government extension agents. That knowledge transfer has been corporatised such that it is provided by agri-business in relation to their particular seed systems or is available for a fee from private consultation companies such as Agri-Trend Agrology Ltd. Consequently knowledge and agency pass from the individual to the corporation under the current hegemony.

It isn't just local production and family farms that are challenged by current trends; agri-businesses are also controlling commodity transportation. First local elevators and rail lines closed down in favour of centralization to massive inland terminals. Now,

> a lot of the grain companies Cargill, Agricore, they have what's called on farm pickup so they're using their own truckers in lots of cases and they're sending their truck to your farm to pick your grain to haul it to their facility type of thing. So that again takes out your local grain hauler that may have a trucking company and it's hauling grain. If these big grain companies are, have their own truckers under contract, then that guy may, it takes away someone in your community that was maybe doing that job prior to type of thing (rural male, agriculture).

The implications are increasing loss of control over employment and income opportunities, and further de-skilling of the workforce in rural communities. Between rising fuel prices and loss of trade when one transport company contracts to a do all a grain company's hauling, the community experiences a reduction in independent businessmen.

> You try to find local [truckers] but they're getting fewer and fewer all the time. The way it's happening with fuel costs and that kind of thing and they're just, it's more competitive out there. They're having a tougher time surviving type of thing. . . . It's not like there's five or ten that you can phone and price or whatever kind of thing. There's one or two, you know (rural male, agriculture).

A loss of entrepreneurs represents a loss of human capital: the whole skill-set involved in running a business. Additionally, the farmer no longer has the option of choosing to deal with a local. This domino effect results in a loss of control and knowledge at the local level.

In this study, discussion of the trends affecting the farming community illustrates the loss of knowledge, and consequently power, that occurs with economic expansionist hegemony. However the connections between power, knowledge, agency and hegemony were also evident in discussions of local government. There has been an increasing amount of legislation with which a council needs be familiar, which has been one of the deterrents to people running for local office.

> It's just times have changed. The way council may have ran in the 1950's or in the 1960's isn't the same. There's a lot more reading and a lot more contracts and a lot more involvement from all level, be it accountants, be it legal, be it provincial, that you have to address and cover. So it's very demanding, very demanding (town male, industry).

This isn't to say that members of a small community aren't up to the job. But there is a decreasing pool of those with the capability and interest in doing the job, as many young people leave the community for education and jobs and don't return. Consequently there is a contradiction: federal and provincial services becoming increasingly centralized - schools and health care being the examples raised – effectively removing local knowledge from the decision making structure, such that, given time there is a loss of knowledge of operating those institutions, while there is an increasing expectation of municipal level 'self-help' (Lawrence *et al.*, 2001). There has also been a concurrent downloading of responsibility from the federal and provincial level without a corresponding increase in resources available to municipalities (Chouinard and Crooks, 2008; Hanlon *et al.*, 2007; Skinner and Joseph, 2007)

In my interviews, knowledge was raised as something that could be gained through experience, learning from others' examples or being the example. With knowledge being truth, the question becomes whether the knowledge disseminated is in discourses supporting hegemony or counter-hegemony. This is where a longitudinal study would be suitable, to establish if those espousing the alternative truth of sustainability can manage to disseminate that knowledge sufficiently well that it is accepted within the broader community. A group of people in the Viking community have formed an association:

> a group called ROARS, Rural Outreach and Agricultural Renaissance Society, which is going to be advocating this [sustainable systems]. It's going to be standing up for small communities and farms and hopefully offering a model. (rural male, P1)

Notably a number of the key people identified in interviews are also involved in or supportive of this group. Their actions constitute a play in the 'game of truth' in which local knowledge, and subjugated knowledge, are presented as discourses of truth alternative to those of economic growth. While such a group may not be able to overcome economic expansionist hegemony in a broad sense, they may be able to locally promote and express community sustainability in a more counter-hegemonic fashion.

In conclusion this research project has contributed to the literature in its provision of a qualitative study of individual perceptions of community sustainability. The validity and generalizability of this study is supported in that my results reflect those of other, quantitative studies conducted in similar communities. Though generally neoliberal globalization has given way to territorial jingoism, the economic expansionism that accompanied neoliberalism seems to continue unabated: the effects of globalization continue to be felt in Alberta's rural communities. The hegemony of economic expansionism is notable and may be particularly so given Alberta's booming oil and gas economy. Given said jingoism of the United States, Canada's largest trading partner, and its thirst for 'safe' oil, it seems unlikely that economic expansionism is going to lose its hegemony any time soon.

Power, knowledge and discourse are articulated and contribute to hegemony. How each is employed has an effect on community sustainability, a fact that is recognized by a few participants. Some recognize the workings of power and knowledge in certain areas, but not others. Some are fully cognizant of the workings of power, but there is a feeling of limited agency in the face of that power, and a recognition that without collective agency, the community will suffer.

> The problem is not changing people's consciousnesses – or what's in their heads – but the political, economic, institutional regime of the production of truth.
>
> It's not a matter of emancipating truth from every system of power (which would be a chimera, for truth is already power) but of detaching the power of truth from the forms of hegemony, social, economic, and cultural, within which it operates at the present time (Foucault (2003 [1976], p.317-18).

Future Research Directions

As noted above, longitudinal research, be it in Viking or another community, would be of benefit to establish the function of social capital, particularly in terms of the capacity of key people in disseminating alternative discourses of truth, in the journey toward sustainability. Furthermore, longitudinal research would be important in charting the course of attitudes toward community sustainability. For example, I was interviewing farmers at a time when prices were not good in any commodity and input costs were high. It was the beginning of the season, a point at which a lot has been invested and the promise of return on that investment was precarious. However, come a year later and grain prices are as high as they ever have been. How might that change perceptions of community sustainability? I do know that in a recent conversation with a farmer from another small community, he saw hope for the future of agriculturally based rural communities for the first time in a long time. The fact that farmers could actually make an income from their land would be incentive to keep them, and their families, in farming and contributing to a community. However, these prices do not reflect a fundamental change in the exploitative relations of power in agroindustrialization. Hence these 'good times' remain precarious. Would that fact be acknowledged? In terms of the other dimensions of sustainability, I worry about habitat conservation and environmental sustainability as pasture and marginal lands suddenly become more valuable if broken and seeded to grain. Would that be noticed as a community sustainability issue? Or would it be ignored in the interests of maintaining population in a community?

On another point, the imminent opening of the new Carena complex was a point of pride and excitement for almost all my participants. Given a few years would it lose its place as exemplary of community sustainability? What factors will contribute to or inhibit the success of the facility?

Other questions arising deal with issues of scale. Some of my participants raised the issue of multinationals and their relationship with maintaining a local economy. However, beyond a single participant, broader world sustainability wasn't addressed as relative to community sustainability. Thus, an avenue for exploration would be to find out to what extent, if at all, people conceive of the importance of sustainability beyond their community as being important to their own sustainability. Bringing the scale down from global sustainability, it would be of benefit to find out how people in a region conceive of community sustainability and whether they are willing to extend their concept of community beyond their immediate locality as Flora (1990, citing Flora and Flora, 1988) found that one attribute of successful, and potentially sustainable communities comes out of a broad definition of community.

Research without application is of limited value. During the course of this project, a number of participants discussed ideas that they had for contributing to sustainability. It is frequently noted that entrepreneurial individuals are drawn away from small communities with the result that the necessary human capital to contribute to community sustainability is no longer present (Lawrence *et al.*, 2001; Sumner, 2005). Thus it would seem valuable to enter into an academic-community partnership in developing applied research projects with the intent to establish first, the feasibility of developing a proposed project; and if feasible, then to actually implement the project. As an example, it was proposed that greenhouses be developed in conjunction with the new arena, utilizing waste heat from the building to heat the greenhouses with water coming from the town's water reservoirs as the reservoirs are no longer being used to source town water. There are any number of departments at a university or college that could partner in such a project. This kind of work would be exemplary of resource-sharing of social capital. A significant problem identified by participants in getting projects going is a lack of monetary resources. Partnerships with educational institutions and government ought to be possible to access those resources for the benefit of all those involved.

On a note unrelated to applied research and more tangential, there were two participants who made interesting side comments that may be worth further investigation. They both made mention of community stories, namely ghost stories, though without deep elaboration – or probing on my part – as to what that might mean for sustainability. One suggested that stories give character to community but I believe that community stories and myths in general would be an interesting avenue of investigation in terms of identity and attachment to place with their attendant implications for sustainability.

Chapter Seven

CONCLUSION

The objective of this research project was to explore the topic of community sustainability from the point of view of community members in order to reveal what informs the concept and the dimensions included in its definition. A further objective was to utilize a qualitative visual methodology that encourages depth and breadth of response and exposes significant symbols for respondents.

Community sustainability is a difficult concept. When asked how he would define community sustainability, one participant responded, "A riddle wrapped in an enigma." That statement summarizes very well the complexities surrounding the topic. Even though each person interviewed had a set idea of the services and characteristics that they considered to be important in contributing to Viking's sustainability, the issue is whether those aspects do, in fact, contribute to sustainability or whether they are related to conventional community economic development. This is not to suggest that no aspect of conventional community development is sustainable, but rather that that development paradigm needs to be assessed through a lens of the counter-hegemonic discourse of sustainable development. Balance among all the dimensions needs to be achieved for community development to be sustainable.

The method of participant-generated photo elicitation interviews was effective. I believe that it did help in engaging participants, and that it focused the subsequent interview. Though it wasn't strictly necessary – I had two very insightful interviews with individuals who did not take photos – it was useful. For example, one participant whom I know could have given a thoughtful interview without engaging in the photography portion of the exercise, said that he was surprised by the photography exercise. He had expected to take a lot of photos in the countryside but had ended up doing more in town. This points to the usefulness of the tool, in that even those who are familiar and comfortable with the topic found that they could be engaged further and in a manner that was not initially predictable to themselves.

Summary of the findings

Viking community members did conceive of community sustainability in terms of the economic, environmental, social, governance, and cultural dimensions, though in all five only in a minority of instances. The economic and social dimensions were the most prominent. The appearance of all the dimensions indicated that at a collective level, community sustainability is well encompassed, in spite of the fact that the term 'community sustainability' had limited resonance. Part of that limited resonance was reflected in expressions of community sustainability that portrayed the hegemony of economic expansionism. Maintaining the status quo, in terms of traditional community economic development, and facilitating the development of Viking as a bedroom community were concrete examples of economic expansionist hegemony. Counter-hegemonic conceptions of community sustainability were also presented. Most participants conceptions of community sustainability lay along a spectrum between strongly hegemonic and strongly counter-hegemonic. The inverse of hegemony is coercion. Coercion was most strongly identified with agroindustrialization, though issues of control were also raised with regard to water supply and other utilities.

All individuals expressed some degree of agency with regard to their ability to support their view of community sustainability. Voluntarism was the most common expression of agency. Those with strongly counter-hegemonic conceptualizations extended their conception of agency to include that of being examples to others and of being a source of knowledge, though theirs was an admitted subjugated knowledge.

Sense of place did contribute to community sustainability in terms of maintaining population by drawing back or keeping local those people with personal history in the community. Those who expressed the strongest sense of place were multi-generation, most often farmers. Though farmers had the strongest sense of place, that sense was not, with one exception, expressed in terms of attachment to biophysical features. The emphasis on the attachment to family land, was on family. The social encompassed the physical, evident in a desire to return "home" to raise a family.

Other expressions of sense of place were also couched in terms of the social: pride manifested itself as support for the community; and a generally positive social atmosphere, into which at least some newcomers are quickly accepted. While those with longer term connections to the community expressed greater attachment in terms of unwillingness to leave, even those who were newcomers were sufficiently pleased with the community to lack a strong inclination to leave, though they did indicate that being closer to the city would be preferable. Many of the youth expressed a desire to leave but qualified that with the indication that they would like to raise families in a small town, if not in Viking itself.

Social capital was present in the community both formally and informally. Bonding social capital was both formal and informal. It included formal associations such as churches, youth group, Communities in Bloom and various other clubs and organizations. Informal social capital was evident through expressions of the community being one that cares for its citizens, and for itself generally. The presence of extended family for many people contributed to bonding social capital. That form of bonding did manifest itself as exclusivity with some incomers identifying a difficulty 'breaking in' to the community. Bridging capital that was identified was that which linked municipal governments; and an interdenominational church group, both of which were identified as having beneficial consequences in terms of economic development and social support. Projects that have arisen from the use of social capital, including the restoration of the train station and the building of the new arena complex, were raised as examples of community sustainability. The involvement of social capital in the dissemination of knowledge was evident in that several people identified themselves as sources of information and they were so identified by others, as well. Such people are key for leading initiatives, providing information and inspiring others.

Strengths and Limitations

There are a number of strengths to this study. The qualitative method allowed revelations that would not have occurred with use of a survey instrument. For example, as my assumption was that environment would figure highly among respondents definitions of sustainability, any instrument I designed would have reflected that assumption. I would not have discovered that it is not as focal an issue as I had thought, and that the discourse surrounding the environmental dimension was very reflective of the degree of economic expansionist hegemony present in the participant's conception of community sustainability. I would have missed the emphasis on the relationship of pride to community sustainability. And I would have missed the association between agriculture and community identity.

Though interviews are a co-construction of knowledge between interviewer and respondent, I do not feel that relationship between myself and my participants was unduly imbalanced to the point of interviews merely reflecting my conceptualization of community sustainability back to me. The fact that conceptualizations of sustainability occurred along a range from hegemonic to counter-hegemonic suggests that participants trusted me and did not feel in a subordinate position of power. The creation of the photographs gave participants a stake and active role in the process.

The results of this study would appear to be transferable. In comparisons with other studies both in Canada and New Zealand involving conceptualizations of sustainability and of rural-town relationships, my results are comparable. This suggests that while rural communities are not homogenous, there are characteristics that may be broadly generalized.

Limitations mainly surrounded the photographic method. Though I found it useful, it was more time consuming than just interviewing as cameras have to be distributed and then collected again. Most people completed the photographs quickly but others needed several reminder phone calls. The other problem surrounded taking photos of people. The social dimension of sustainability came through as very important to community sustainability yet there were very few photographs of people. This was due to the necessity of signing permission forms. Several participants indicated that they would have liked to have included people in their photos but refrained from doing so due to the palaver of gaining permission. Hence that can be a barrier.

Future Areas of Research

The completion of this project has suggested a number of future areas of research. First of all, human perception is dynamic and contextual. Consequently, people's conceptualizations of community sustainability will change. Hence longitudinal study would be beneficial in assessing changes over time and how events at various scales affect conceptualizations of sustainability.

A more immediate idea is in regard to developing a collective conceptualization of sustainability. I think it would be informative to form focus groups and present a selection of the photos taken in this project, for the purpose of discovering how groups of people interpret the photos in terms of community sustainability. This kind of participatory exercise would reveal the collective process by which a group comes to an understanding of a complex concept and would be useful at the community level for their own understanding of planning for sustainability.

From a completely different angle, I was intrigued by two comments regarding local stories. I wonder to what degree story telling and local tales contribute to identifying with a community and a sense of place. Still focusing on identity, what is it about agriculture that is so compelling that even those who were not raised in it locate themselves within the group identity of agriculture and prairie? Can that identity be tied into approaches to community sustainability that support local sustainable agriculture?

Concluding Remarks

The primacy of the economic and the social are evident in people's thinking about sustainability. Work could still be done on better integrating environment and governance into that conception. There is no simple formula for creating a sustainable rural community. Higher levels of government and academic institutions must be willing to provide support, resources and services to communities without trying to drive their own agendas. But outsiders cannot create the desire to sustain the community. That must come from community members and thus, in the end, the social will be a major determinant of whether a community thrives or fails.

REFERENCES

Aberley, Doug, ed. 1994. *Futures by design: the practice of ecological planning.* Gabriola Island: New Society Publishers.

Aberley, Doug, ed. 1993. *Boundaries of home: mapping for local empowerment.* Gabriola Island, BC: New Society Publishers.

Adam, Frane, and Borut Rončević. 2003. Social capital: Recent debates and research trends. Social Science Information 42, (2): 155-83.

Aguirre, Benigno E. 2002. "Sustainable development" as collective surge. *Social Science Quarterly* 83, (1): 101-18.

Alberta Agriculture, Food and Rural Development (AAFRD). Alberta's agriculture growth strategy: $20B/$10B by 2010. 2004 [cited January 10 2008]. Available from http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/ind10344/$file/AgGrowthStrategyJul04.pdf?OpenElement.

Alberta Energy. Energy's history in Alberta. 2008 [cited July 3, 2008]. Available from http://www.energy.alberta.ca/About_Us/1133.asp.

Alberta Environmentally Sustainable Agriculture (AESA). Alberta environmentally sustainable agriculture. no date [cited January 10 2008]. Available from www.aesa.ca.

Alberta Research Council. 2006. *Study on identifying rural sociological barriers to adoption.* Edmonton, Alberta: Alberta Research Council.

Alberta Urban Municipalities Association. 2006. Municipal Sustainability Planning Guide. Edmonton, Alberta: Alberta Urban Municipalities Association. Also available from http://msp.munilink.net/Overview/Resources/

Allen, Patricia L., and Carolyn E. Sachs. 1992. The poverty of sustainability: An analysis of current positions. *Agriculture and Human Values* 9, (4): 29-35.

Altman, Irwin, and Setha M. Low. 1992. Place attachment: A conceptual inquiry. In *Place attachment.*, eds. Irwin Altman, Setha M. Low, 1-12. New York, New York: Plenum Press.

Ambard, Marke. 2004. A photo-assisted exploration of sense of place in Hinton and Jasper, Alberta. Masters Thesis, University of Alberta.

Barnes, D., and A. Blevins. 1992. Farm structure and the economic well-being of non-metropolitan counties. *Rural Sociology* 57, (3): 333-346.

Barraket, Jo. 2005. Enabling structures for coordinated action. In *A dynamic balance: Social capital and sustainable community development.*, eds. Ann Dale and Jenny Onyx, 71-86. Vancouver, B.C.: UBC Press.

Beckerman, Wilfred. 1994. 'Sustainable development': Is it a useful concept? *Environmental Values* 3: 191-209.

Beckie, Mary Ann. 2000. Zero tillage and organic farming in Saskatchewan: An interdisciplinary study of the development of sustainable agriculture. PhD. Thesis, Division of Extension, University of Saskatchewan.

Beckley, Thomas M. 2003. *The relative importance of sociocultural and ecological factors in attachment to place.* Portland, Oregon: Pacific Northwest Research Station, General Technical Report PNW-GTR-566.

Beilin, Ruth. 2005. Photo-elicitation and the agricultural landscape: 'seeing' and 'telling' about farming, community and place. *Visual Studies* 20, (1): 56-68.

Belk, Russell W. 1992. Attachment to possessions. In *Place Attachment.*, eds. Irwin Altman and Setha M. Low, 37-62. New York, New York: Plenum Press.

Bennett, John W. 1982. *Of time and enterprise: North American family farm management in a context of resource marginality.* Minneapolis, Minnesota: University of Minnesota Press.

Bernard, Jessie. 1973. *The sociology of community.* Glenview, Illinois: Scott, Foresman and Company.

Bird, Elizabeth Ann R., Gordon L. Bultena, and John C. Gardner, eds. 1995. *Planting the future: Developing an agriculture that sustains land and community.* Ames, Iowa: Iowa State University Press.

Black, Alan, and Philip Hughes. 2005. Social capital and the sustainability of rural or remote communities: Evidence from the Australian community survey. In *A dynamic balance: Social capital and sustainable community development.*, eds. Ann Dale, Jenny Onyx, 159-175. Vancouver, B.C.: UBC Press.

Bocock, Robert. 1986. *Hegemony.* Chicester, U.K.: Ellis Horwood Ltd.

Bourdieu, Pierre. 1986. The forms of capital. In *Handbook of theory and research for the sociology of education.*, ed. John G. Richardson, 241-258. New York, New York: Greenwood Press.

Brandenburg, Andrea M., and Matthew S. Carroll. 1995. Your place or mine?: The effect of place creation on environmental values and landscape meanings. *Society and Natural Resources* 8: 381-98.

Brehm, Joan M. 2007. Community attachment: The complexity and consequence of the natural environment facet. *Human Ecology* 35: 477-88.

Brennan, M. A., and A. E. Luloff. 2007. Exploring rural community agency differences in Ireland and Pennsylvania. *Journal of Rural Studies* 23, (1): 52-61.

Bridger, Jeffery C., and A. E. Luloff. 2001. Building the sustainable community: Is social capital the answer? *Sociological Inquiry* 71, (4): 458-72.

Brint, Steven. 2001. *Gemeinschaft* revisited: A critique and reconstruction of the community concept. *Sociological Theory* 19, (1): 1-23.

Bryant, Christopher R. 1999. Community change in context. In *Communities, development, and sustainability across Canada.*, eds. John T. Pierce, Ann Dale. Vancouver, B.C.: UBC Press.

Bryman, Alan, and James J. Teevan. 2005. *Social research methods, Candian edition.* Don Mills, Ontario: Oxford University Press.

Buckland, Jerry. 2004. *Ploughing up the farm: Neoliberalism, modern technology and the state of the world's farmers.* Black Point, Nova Scotia: Fernwood Publishing.

Burton, Rob J. F. 2004. Seeing through the 'good farmer's' eyes: Towards developing an understanding of the social symbolic value of 'productivist' behaviour. *Sociologia Ruralis* 44, (2): 195-215.

Buttimer, Anne. 1998. Making sustainability work at the local level. *Environment* 40, (3): 13.

———. 1980a. Home, reach, and the sense of place. In *The human experience of space and place.*, eds. Anne Buttimer, David Seamon, 166-187. New York, New York: St. Martin's Press.

———. 1980b. Social space and the planning of residential areas. In *The human experience of space and place.*, eds. Anne Buttimer, David Seamon, 21-54. New York, New York: St. Martin's Press.

Cappello, Marva. 2005. Photo interviews: eliciting data through conversations with children. *Field Methods* 17, (2): 170-182.

Carruthers, David. 2001. From opposition to orthodoxy: The remaking of sustainable development. *Journal of Third World Studies* 18, (2): 93-112.

Carson, Rachel. 1962. *Silent spring*. Boston: Houghton Mifflin.

CBC News. November 22, 2006 [accessed July 9, 2008]. Mayor wants Imperial oil sands project delayed. Available from http://www.cbc.ca/canada/edmonton/story/2006/11/22/oilsands-hearing.html.

Charmaz, Kathy. 2000. Grounded theory: Objectivist and constructivist methods. In *Handbook of qualitative research.*, eds. N. K. Denzin, Y. S. Lincoln. 2nd ed., 509-535. Thousand Oaks, California: Sage.

Clark-Ibáñez, Marisol. 2004. Framing the social world with photo-elicitation interviews. *American Behavioural Scientist* 47, (12):1507-1527.

Chouinard, Vera, and Valorie A. Crooks. 2008. Negotiating neoliberal environments in British Columbia and Ontario, Canada: Restructuring of state-voluntary sector relations and disability organizations' struggles to survive. *Environment and Planning C - Government and Policy* 26, (1): 173-90.

Cocklin, Chris. 1995. Agriculture, society and environment: Discourses on sustainability. *The International Journal of Sustainable Development and World Ecology* 2, (4): 240-56.

Cohen, Anthony P. 1985. *The symbolic construction of community.* New York, New York: Ellis Horwood Ltd. and Tavistock Publications Ltd.

Coleman, James. 2000. [1988] Social capital in the creation of human capital. In *Social capital: a multifaceted perspective.*, eds. Partha Dasgupta and Ismail Serageldin, 13-39. Washington, D.C.: The World Bank.

Collier, John Jr., and Malcolm Collier. 1986. *Visual anthropology: Photography as a research method, revised and expanded edition.* Albuquerque, New Mexico: University of New Mexico Press.

Collier, Malcolm. 2001. Approaches to Analysis in Visual Anthropology. In *Handbook of visual analysis.,* eds. Theo van Leeuwen and Carey Jewitt, 35-60. London, UK: Sage Publications.

Commoner, Barry. 1971. *The closing circle: Nature, man and technology.* New York: Knopf.

Conroy, Maria Manta. 2006. Moving the middle ahead: Challenges and opportunities of sustainability in Indiana, Kentucky, and Ohio. *Journal of Planning Education and Research* 26: 18-27.

the Cooperators. 2007. *The Cooperators Sustainability Report 2007.* [cited June 10, 2008]. Available from http://www.cooperators.ca/static/pdf/en/Sustainability/FullReport.pdf

Cortese, Charles A. 1979. The social impacts of energy development in the west: An introduction. *The Social Science Journal* 16, (2): 1-7.

Dair, Carol M., and Katie Williams. 2006. Sustainable land reuse: The influence of different stakeholders in achieving sustainable brownfield developments in England. *Environment and Planning A* 38: 1345-66.

Dale, Ann. 2005. Social capital and sustainable community development: is there a relationship. In *A dynamic balance: social capital and sustainable community development.*, eds. Ann Dale and Jenny Onyx, 13-30. Vancouver, B.C.: UBC Press.

Dale, Ann. 2001. *At the edge: Sustainable development in the 21st century.* Vancouver, B.C.: UBC Press.

Dale, Ann, and Jenny Onyx, eds. 2005. *A dynamic balance: Social capital and sustainable community development*. Vancouver, B.C.: UBC Press.

Day, Graham. 1998. Working with the grain? towards sustainable rural and community development. *Journal of Rural Studies* 14, (1): 89-105.

Douglas, David J. A. 1989. Rural community development and sustainability. In *Sustainable rural communities in Canada: proceedings of Rural Policy Seminar #1, October 11-13, 1989.*, eds. Michael E. Gertler and Harold R. Baker, 66-72. Saskatoon, Saskatchewan: The Canadian Agriculture and Rural Restructuring Group.

Durrenberger, E. Paul, and Kendall M. Thu. 1996. The expansion of large scale hog farming in Iowa: The applicability of Goldschmidt's findings fifty years later. *Human Organization* 55, (4): 409-15.

Dyer, Simon, Jeremy Moorhouse, Katie Laufenberg, and Rob Powell. Undermining the environment: the oils ands report card. January 2008 [cited July 9, 2008]. WWF and the Pembina Institute. Available from http://pubs.pembina.org/reports/OS-Undermining-Final.pdf.

Dykeman, Floyd W. 1990. Developing an understanding of entrepreneurial and sustainable rural communities. In *Entrepreneurial and sustainable rural* *communities.*, ed. Floyd W. Dykeman, 1-22. Sackville, New Brunswick: Rural and Small Town Research and Studies Programme.

Echtay, Maya. 2007. Staff and other changes at the Viking school. *The Weekly Review*, September 11, 2007, 2007.

Ehrlich, Paul R. 1968. *The population bomb*. New York, New York: Ballantine Books.

Eicher, Annie. Organic agriculture: A glossary of terms for farmers and gardeners. 2003 [cited July 4, 2008]. University of California Cooperative Extension. Available from http://ucce.ucdavis.edu/files/filelibrary/1068/8286.pdf.

Etzioni, Amitai. 2000. Creating good communities and good societies. *Contemporary Sociology* 29, (1): 188-95.

Everitt, John, and Robert Annis. 1992. The sustainability of prairie rural communities. In *Contemporary rural systems in transition, volume 2: Economy and society.*, eds. I. R. Bowler, C. R. Bryant and M. D. Nellis, 213-222. Wallingford, U.K.: C.A.B. International.

Eversole, Robyn, and John Martin. 2006. Jobs in the bush: global industries and inclusive rural development. *Social policy and administration* 40, (6): 692-704.

Falk, Ian, and Sue Kirkpatrick. 2000. What *is* social capital? A study of interaction in a rural community. *Sociologia Ruralis* 40, (1): 87-110.

Farm 'n' Friends. January 27, 2007. Farmers forming group to protect land against $1.5 billion project. *Farm 'n' Friends* 11, (11) (Lamont issue): 1.

Federal Task Force on Agriculture. 1970. *Canadian agriculture in the seventies: Report of the federal task force on agriculture, December 1969*. Ottawa, Ontario: Queen's Printer.

Federation of Canadian Municipalities (FCM). Welcome to the Green Municipal Fund approved projects database. 2008 [cited July 9, 2008]. Available from http://www.sustainablecommunities.ca/Search/Search/Search.aspx?lang=e

Felstead, Alan, Nick Jewson, and Sally Walters. 2004. Images, interviews and interpretations: Making connections in visual research. In *Seeing is believing? Approaches to visual research: Studies in qualitative methodology, volume 7.*, ed. Christopher Pole, 105-121. Oxford, U.K.: Elsevier Ltd.

Field, John. 2003. *Social capital*. London, U.K.: Routledge.

Fisher, Adrian T., Christopher C. Sonn, and Brian J. Bishop, eds. 2002. *Psychological sense of community: research applications, and implications.* New York, New York: Kluwer Academic/Plenum Publishers.

Flora, Cornelia Butler. 1995. Social capital and sustainability: Agriculture and communities in the great plains and corn belt. *Research in Rural Sociology and Development* 6: 227-46.

Flora, Cornelia Butler, Jan L. Flora, Jacqueline D. Spears, Louis E. Swanson, Mark B. Lapping, and Mark L. Weinberg. 1992. *Rural communities: Legacy and change*. Boulder, Colorado: Westview Press.

Flora, Cornelia Butler. 1990. Sustainability of agriculture and rural communitites. In *Sustainable agriculture in temperate zones.*, eds. Charles A. Francis, Cornelia Butler Flora and Larry D. King, 343-359. New York, NY: John Wiley & Sons, Inc.

Foucault, Michel. 2003 [1968]. On the archaeolgoy of the sciences: Response to the epistemology circle. In *The essential Foucault.*, eds. Paul Rabinow, Nikolas Rose, 392-422. New York, New York: The New Press.

———. 2003 [1976]. Truth and power. In *The essential Foucault.*, eds. Paul Rabinow, Nikolas Rose, 300-318. New York, New York: The New Press.

———. 2003 [1984]. The ethics of the concern of the self as practice of freedom. In *The essential Foucault.*, eds. Paul Rabinow, Nikolas Rose, 25-42. New York, New York: The New Press.

———. 1980 [1976]. Two lectures - lecture two: 14 January 1976. In *Power/Knowledge: Selected interviews and other writings 1972-1977.*, ed. Colin Gordon, 78-108. New York, New York: Pantheon Books.

———. 1980 [1975]. Prison talk. In *Power/Knowledge: Selected interviews and other writings 1972-1977.*, ed. Colin Gordon, 37-54. New York, New York: Pantheon Books.

Fried, Marc. 1986. The neighborhood in metropolitan life: Its psychosocial significance. In *Urban neighborhoods: Research and policy.*, ed. Ralph B. Taylor, 331-363. New York, New York: Praeger Publishers.

Freidenberg, Judith. 1998. The social construction and reconstruction of the other: fieldwork in El Barrio. *Anthropological Quarterly* 71, (4): 169-185.

Fuller, Tony, Philip Ehrensaft, and Michael Gertler. 1989. Sustainable rural communities in Canada: Issues and prospects. Paper presented at Sustainable Rural Communities in Canada: Proceedings of Rural Policy Seminar #1, Saskatoon, Saskatchewan.

Gale, Richard P., and Sheila M. Cordray. 1994. Making sense of sustainability: Nine answers to 'what should be sustained?'. *Rural Sociology* 59, (2): 311-32.

Gertler, Michael E. 1999. Sustainable communities and sustainable agriculture. In *Communities, development, and sustainability across Canada.*, eds. John T. Pierce, Ann Dale. Vancouver, B.C.: UBC Press.

Gertler, Michael E. 1994. Rural communities and the challenge of sustainability. In *Towards sustainable rural communities: the Guelph seminar series.*, eds. John M. Bryden, Lisa Leblanc, and Craig Teal, 69-78. Guelph, Ontario: University of Guelph.

Ginder, Roger G., Kenneth E. Stone, and Daniel Otto. 1985. Impact of the farm financial crisis on agribusiness firms and rural communities. *American Journal of Agricultural Economics* 67, (5): 1184-90.

Glaeser, Edward L. 2001. The formation of social capital. In *The contribution of human and social capital to sustained economic growth and well-being.*, eds. John F. Helliwell, Aneta Bonikowska, 381-393. Ottawa, Ontario: OECD and Human Resources Development Canada.

Gloor, Daniela, and Hanna Meier. 2000. A river revitalization seen through the lens of local community members. *Visual Sociology* 15: 119-34.

Gobo, Giampietro. 2004. Sampling, representativeness and generalizability. In *Qualitative Research Practice.*, eds. Clive Seale, Giampietro Gobo, Jaber F. Gubrium and David Silverman, 435-456. London, UK: Sage.

Goldfarb, Theodore D., ed. 2000. *Notable selections in environmental studies.* 2nd ed. Guilford, Connecticut: Dushkin/McGraw-Hill.

Goreham, Gary A., Gordon L. Bultena, Eric O. Hoiberg, Youngs, George A., Jr., Susan Kathryn Jarnagin, and David O'Donnell. 1995. Sustainable agriculture: A better quality of life? In *Planting the future: Developing an agriculture that sustains land and community.*, eds. Bird, Elizabeth Ann R., Gordon L. Bultena and John C. Gardner, 147-153. Ames, Iowa: Iowa State University Press.

Goreham, Gary A., Youngs, George A., Jr., Chuck Hassebrook, and David L. Watt. 1995. Community trade patterns of conventional and sustainable farmers. In *Planting the future: Developing an agriculture that sustains land and community.*, eds. Bird, Elizabeth Ann R., Gordon L. Bultena and John C. Gardner, 131-146. Ames, Iowa: Iowa State University Press.

Goudy, Willis J. 1990. Community attachment in a rural region. *Rural Sociology* 55, (2): 178-98.

Gramsci, Antonio. 1971. *Selections from the prison notebooks of Antonio Gramsci.* Trans. and eds. Quintin Hoare and Geoffrey Nowell Smith. New York, New York: International Publishers.

Granovetter, Mark. 1983. The strength of weak ties: A network theory revisited. *Sociological Theory*: 201-34.

Halfacree, K. H. 1993. Locality and social representation: Space, discourse and alternative definitions of the rural. *Journal of Rural Studies* 9, (1): 23-37.

Hall, Alan. 1998. Sustainable agriculture and conservation tillage: Managing the contradictions. *The Canadian Review of Sociology and Anthropology* 35, (2): 221-52.

Hanlon, Neil, Mark Rosenberg, and Rachael Clasby. 2007. Offloading social care responsibilities: recent experiences of local voluntary organizations in a remote urban centre in British Columbia, Canada. *Health and Social Care in the Community* 15, (4): 343-351.

Hanna, Kevin S. 2005. Planning for sustainability: Experiences in two contrasting communities. *Journal of American Planning Association* 71, (1): 27-41.

Hardin, Garrett. 1968. The tragedy of the commons. *Science* 162, (3859): 1243-8.

Harper, Douglas. 2003. Framing photographic ethnography: A case study. *Ethnography* 4, (2): 241-266.

———. 2001. *Changing works: Visions of a lost agriculture*. Chicago: University of Chicago Press.

———. 1998. An Argument for Visual Sociology. In *Image-based research: A sourcebook for qualitative researchers.*, ed. Jon Prosser. London, UK: Falmer Press.

Harris, C. K., and Jess Gilbert. 1982. Large scale farming, rural income and Goldschmidt's agrarian thesis. *Rural Sociology* 47, (3): 449-58.

Hay, Robert. 1998. A rooted sense of place in cross-cultural perspective. *The Canadian Geographer* 42, (3): 245-66.

———. 1992. An appraisal of our meaningful relationships in place. *The Trumpeter* 9, (3).

———. 1988. Toward a theory of sense of place. *Trumpeter* 5, (4): 159-64.

Hayes, Micheal N., and Alan L. Olmstead. 1984. Farm size and community quality: Arvin and Dinuba revisited. *American Journal of Agricultural Economics* 66, (4): 430-6.

Healy, Stephen. 2004. Power, knowledge and sustainability. Paper presented at Proceedings of the 2002 Berlin Conference on the Human Dimensions of Global Environmental Change "Knowledge for the Sustainability Transition. The Challenge for Social Science", Berlin.

Heffernan, William. 1999 [accessed January 10, 2008]. Report to the national farmers union consolidation in the food and agriculture system. Available from http://home.hiwaay.net/~becraft/NFUFarmCrisis.htm.

Hillier, Jean. 2002. Presumptive planning: From urban design to community creation in one move? In *Psychological sense of community: Research, applications, and implications.*, eds. Adrian T. Fisher, Christopher C. Sonn and Brian J. Bishop, 43-67. New York, New York: Kluwer Academic/Plenum Publishers.

Hiss, Tony. 1990. *The experience of place*. New York, New York: Alfred A. Knopf, Inc.

Hughes, Robert, Jr. 1987. Empowering rural families and communities. *Family Relations* 36: 396-401.

Horne, William R. 2004. Sense of community in the rural-urban fringe: the case of Forrest, Manitoba. In *The structure and dynamics of rural territories: geographical perspectives.*, eds. Doug Ramsey and Christopher Bryant, 89-102. Brandon, Manitoba: Brandon University, Rural Development Institute.

Hummon, David M. 1992. Community attachment: Local sentiment and sense of place. In *Place attachment.*, eds. Irwin Altman, Setha M. Low, 253-278. New York, New York: Plenum Press.

———. 1990. *Commonplaces: Community ideology and identity in American culture*. Albany, New York: State University of New York Press.

Infrastructure Canada. Gas tax agreement, Canada-Alberta. Agreement on the transfer of federal gas tax revenues under the new deal for cities and communities, 2005 – 2015. 2005 [cited July 9, 2008]. Available from http://www.infrastructure.gc.ca/ip-pi/gas-essence_tax/gt_can_ab_e.shtml

International Union for Conservation of Nature and Natural Resources (IUCN). 1980. *World conservation strategy.* Gland, Switzerland: IUCN.

Ives, Peter. 2004. *Language and Hegemony in Gramsci.* London, England: Pluto Press.

Jackson-Smith, Douglas, and Gillespie, Gilbert W., Jr. 2005. Impacts of farm structural change on farmers' social ties. *Society and Natural Resources* 18: 215-40.

Jacob, Norman. 1988. Sustainable development: A view of limitless growth? *Trumpeter* 5, (4): 131-2.

Jacobs, Michael. 1995. Sustainable development, capital substitution and economic humility: A response to Beckerman. *Environmental Values* 4: 57-68.

James, Sarah, and Torbjörn Lahti. 2004. The natural step for communities: how cities and towns can change to sustainable practices. Gabriola Island, BC: New Society Publishers.

Jeannotte, Sharon M. 2003. Singing alone? The contribution of cultural capital to social cohesion and sustainable communities. *The International Journal of Cultural Policy* 9, (1): 35-49.

Johnson, Kenneth M. 1982. Organization adjustment to population change in nonmetropolitan America: A longitudinal analysis of retail trade. *Social Forces* 60, (4): 1123-39.

Johnston, Margaret E., Brian Lorch, and Dave Challen. 2004. Views of community sustainability after a mine closure: A case study of Manitouwadge, Ontario. *Environments* 32, (1): 15-30.

Jones, Roy, and Matthew Tonts. 1995. Rural restructuring and social sustainability: Some reflections on the western Australian wheatbelt. *Australian Geographer* 26, (2): 133-40.

Jones, Owain. 1995. Lay discourses of the rural: Developments and implications for rural studies. *Journal of Rural Studies* 11, (1): 35-49.

Kisko, Adrienne, D. S. Gill, and E. C. Murray. 1994. *Community attachment in Vegreville, Alberta.* Staff Paper 94-02. University of Alberta, Edmonton: .

Lapping, M. B., and A. M. Fuller. 1985. Rural development policy in Canada: An interpretation. *Community Development Journal* 20, (2): 114-9.

Lawrence, Geoffrey. 1990. Agricultural restructuring and social change in rural Australia. In *Rural restructuring: Global processes and their responses.*, eds. Terry Marsden, Philip Lowe and Sarah Whatmore, 101-128. London, UK: David Fulton Publishers.

Lawrence, Geoffrey, Murray Knuttila, and Ian Gray. 2001. Globalization, neoliberalism, and rural decline. In *Writing off the rural west: Globalization, governments, and the transformation of rural communities.*, eds. Roger Epp, Dave Whitson, 89-105. Edmonton, Alberta: The University of Alberta Press and the Parkland Institute.

Lehtonen, Markku. 2004. The environmental-social interface of sustainable development: Capabilities, social capital, institutions. *Ecological Economics* 49: 199-214.

Lewicka, Maria. 2005. Ways to make people active: The role of place attachment, cultural capital, and neighborhood ties. *Journal of Environmental Psychology* 25: 381-95.

Lewis, Tammy L. 2000. Media representations of "sustainable development": Sustaining the status quo? *Science Communication* 21, (3): 244-73.

Liepins, Ruth. 2000. Exploring rurality through 'community': Discourses, practices and spaces shaping Australian and New Zealand rural 'communities'. *Journal of Rural Studies* 16: 325-41.

Lind, Christopher. 1995. *Something's wrong somewhere: Globalization, community and the moral economy of the farm crisis.* Halifax, Nova Scotia: Fernwood Publishing.

Little, Ronald L., and Steven B. Lovejoy. 1979. Energy development and local employment. *The Social Science Journal* 16, (2): 27-49.

Liu, Qiaoming Amy, Vernon Ryan, Herbert Aurbach, and Terry Besser. 1998. The influence of local church participation on rural community attachment. *Rural Sociology* 63, (3): 432-50.

Lobao, Linda, and Katherine Meyer. 2001. The great agricultural transition: Crisis, change, and social consequences of twentieth century US farming. *Annual Review of Sociology* 27: 103-24.

2

Lofland, John, and Lyn H. Lofland. 1995. *Analyzing social settings: A guide to qualitative observation and analysis.* 3rd ed. Belmont, California: Wadsworth Publishing.

Lu, Yao-chi. 1985. Impacts of technology and structural change on agricultural economy, rural communities, and the environment. *American Journal of Agricultural Economics* 67, (5): 1158-63.

Luther, Viki. 1990. Learning from successful communities: Rural case study research. In *Entrepreneurial and sustainable rural communities.*, ed. Floyd W. Dykeman, 193-200. Sackville, New Brunswick: Rural and Small Town Research and Studies Programme.

Lynch, Kevin, ed. 1977. *Growing up in cities: Studies of the spatial environment of adolescence in Cracow, Melbourne, Mexico City, Salta, Toluca, and Warszawa.* Cambridge, Massachusetts: MIT Press.

Macgilliveray, Alex, and Perry Walker. 2000. Local social capital: Making it work on the ground. In *Social capital: Critical perspectives.*, eds. Stephen Baron, John Field and Tom Schuller, 197-211. Oxford, U.K.: Oxford University Press.

Macnaghten, Phil. 2003. Embodying the environment in everyday life practices. *The Sociological Review* 51, (1): 63-84.

Marcus, Clare Cooper. 1992. Environmental memories. In *Place attachment.*, eds. Irwin Altman, Setha M. Low, 87-112. New York, New York: Plenum Press.

Maser, Chris. 1997. *Sustainable community development: Principles and concepts.* Delray Beach, Florida: St. Lucie Press.

Massey, Garth, and David Lewis. 1979. Energy development and mobile home living: The myth of suburbia revised? *The Social Science Journal* 16, (2): 81-91.

Mathijs, E. 2003. Social capital and farmers' willingness to adopt countryside stewardship schemes. *Outlook on Agriculture* 32, (1): 13-6.

McGregor, Andrew. 2004. Sustainable development and 'warm fuzzy feelings': Discourse and nature within Australian environmental imaginaries. *Geoforum* 35, (5): 593-606.

McManus, Phil. 1996. Contested terrains: Politics, stories and discourses of sustainability. *Environmental Politics* 5, (1): 48-73.

Meadowcroft, James. 2000. Sustainable development: A new(ish) idea for a new century? *Political Studies* 48: 370-87.

Meadows, Donella H., Dennis L. Meadows, Jørgen Randers, and Behrens, William W., III. 1972. *The limits to growth: A report for the club of Rome's project on the predicament of mankind.* London, U.K.: Earth Island.

Meister, Mark. 1997. "Sustainable development" in visual imagery: Rhetorical function in the Jeep Cherokee. *Communication Quarterly* 45, (3): 223-234.

Mitura, Verna, and Mike Trant. Statistics Canada, Agriculture Division. Canadian agriculture in 2005: a tough year in review. June 2006 [cited July 9, 2008]. Available from http://www.statcan.ca/english/freepub/21-004-XIE/21-004-XIE2006002.pdf

Monsanto. Technical Bulletin: Roundup Ready Canola System. 2007 [cited May 4, 2008]. Available from http://www.monsanto.ca/_pdfs/seeds_traits/west_rr_canola_system.pdf

Morton, Adam David. 2007. *Unravelling Gramsci: Hegemony and passive revolution in the global political economy.* London, U.K.: Pluto Press.

Morton, Lois Wright. 2003. Small town services and facilities: The influence of social networks and civic structure on perceptions of quality. *City & Community* 2, (2): 101-20.

Murray, Grant, Barbara Neis, and Jahn Petter Johnsen. 2004. Lessons learned from reconstructing interactions between local ecological knowledge, fisheries science, and fisheries management in the commercial fisheries of Newfoundland and Labrador, Canada. *Human Ecology* 34, (4): 549-571.

National Farmers Union (Canada). November 20, 2003. *The farm crisis, bigger farms, and the myths of "competition" and "efficiency".* Saskatoon, Saskatchewan: National Farmers Union.

———. The Farm Crisis, EU Subsidies, and Agribusiness Market Power. 2000 [cited May 22, 2008]. Presented to the Senate Standing Committee on Agriculture and Forestry. Ottawa: NFU. Available at: http://www.nfu.ca/feb17-brief.htm

Nozick, Marcia. 1992. *No place like home: Building sustainable communities.* Ottawa, Ontario: Canadian Council on Social Development.

Onyx, Jenny. 2005. Introduction. In *A dynamic balance: Social capital and sustainable community development.*, eds. Ann Dale, Jenny Onyx, 1-10. Vancouver, B.C.: UBC Press.

———. 1996. *Social capital: Theory and measurement*. Sydney, Australia: University of Technology, Sydney, No. 34.

Onyx, Jenny, and Paul Bullen. 2000. Measuring social capital in five communities. *The Journal of Applied Behavioural Science* 36, (1): 23-42.

Onyx, Jenny, and Rosemary Leonard. 2001. *Social capital: The relative use of strong and loose network ties*. University of Technology, Sydney: Centre for Australian Community Organisations (CACOM), 49.

Onyx, Jenny, Craig Wood, Paul Bullen, and Lynelle Osburn. 2005. *Social capital: A rural youth perspective*. University of Technology, Sydney: Centre for Australian Community Organisations (CACOM), 67.

O'Toole, Kevin, Anne Wallis, and Brad Mitchell. 2006. Local perceptions of sustainability indicators: Issues of scale and implications for management. *Rural Society* 16, (1): 25-46.

Palmer, Howard, and Tamara Palmer. 1990. *Alberta, a new history*. Edmonton, Alberta: Hurtig.

Parkins, John. 1999. Enhancing social indicators research in a forest dependent community. *The Forestry Chronicle* 75, (5): 771-80.

Pepperdine, Sharon. 2000. Social indicators of rural community sustainability: An example from the Woady Yaloak catchment. Paper presented at First National Conference on the Future of Australia's Country Towns, Bendigo, Australia.

Perkins, Douglas, D., and D. Adam Long. 2002. Neighborhood sense of community and social capital: A multi-level analysis. In *Psychological sense of community: Research, applications, and implications.*, eds. Adrian T. Fisher, Christopher C. Sonn and Brian J. Bishop, 271-290. New York, New York: Kluwer Academic/Plenum Publishers.

Pierce, John T., and Ann Dale, eds. 1999. *Communities, development, and sustainability across Canada*. Vancouver, B.C.: UBC Press.

Pink, Sarah. 2001. *Doing visual ethnography : Images, media and representation in research*. London, U.K.: Sage Publications.

Plumptre, Tim. What is governance? no date [cited July 9, 2008]. Institute on Governance. Available from http://www.iog.ca/page.asp?pageID=3&htmlarea=home

Pol, Enric. 2002. The theoretical background of the city-identity-sustainability network. *Environment and Behaviour* 34, (1): 8-25.

Pol, Enric, and Angela Castrechini. 2002. City-identity-sustainability research network: Final words. *Environment and Behaviour* 34, (1): 150-60.

Portes, Alejandro. 1998. Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology* 24: 1-24.

Portes, Alejandro, and Patricia Landolt. 1996. The downside of social capital. *The American Prospect* 26: 18-23.

Pretty, Grace M. H. 2002. Young people's development of the community-minded self: Considering community identity, community attachment and sense of community. In *Psychological sense of community: Research, applications, and implications.*, eds. Adrian T. Fisher, Christopher C. Sonn and Brian J. Bishop, 183-203. New York, New York: Kluwer Academic/Plenum Publishers.

Prosser, Jon. 1998. The status of image based research. In *Image-based research: A sourcebook for qualitative researchers.*, ed. Jon Prosser, 97-112. London, U.K.: Falmer Press.

Prosser, Jon and Dona Schwartz. 1998. Photographs within the sociological research process. In *Image-based research: A sourcebook for qualitative researchers.*, ed. Jon Prosser, 115-130. London, U.K.: Falmer Press.

Putnam, Robert D. 2000. *Bowling alone: the collapse and revival of American community*. New York, New York: Simon & Schuster.

Qualman, Darrin. 2001. Corporate hog farming: The view from the family farm. In *Writing off the rural west: Globalization, governments and the transformation of rural communities.*, eds. Roger Epp, Dave Whitson, 21-38. Edmonton, Alberta: The University of Alberta Press.

Radley, Alan and Diane Taylor. 2003. Image of recovery: A photo-elicitation study on the hospital ward. *Qualitative Health Research* 13, (1): 77-99.

Radley, Alan, Darrin Hodgetts and Andrea Cullen. 2005. Visualizing homelessness: A study in photography and estrangement. *Journal of Community and Applied Social Psychology* 15: 273-295.

Rapley, Tim. 2004. Interviews. In *Qualitative research practice.*, eds. Clive Seale, Giampietro Gobo, Jaber F. Gubrium and David Silverman, 15-33. London, U.K.: Sage.

Redclift, Michael. 2005. Sustainable development (1987-2005): An oxymoron comes of age. *Sustainable Development* 13: 212-27.

Rees, William E. 1988. Sustainable development: Economic myths and ecological realities. *Trumpeter* 5, (4): 133-8.

Riley, Robert B. 1992. Attachment to the ordinary landscape. In *Place attachment.*, eds. Irwin Altman, Setha M. Low, 13-35. New York, New York: Plenum Press.

Robinson, John. 2004. Squaring the circle? Some thoughts on the idea of sustainable development. *Ecological Economics* 48: 369-384.

Roseland, Mark. 2005. *Toward sustainable communities.* Revised edition ed. Gabriola Island, B.C.: New Society Publishers.

———. 1999. Natural capital and social capital: Implications for sustainable community development. In *Communities, development, and sustainability across Canada.*, eds. John T. Pierce, Ann Dale. Vancouver, B.C.: UBC Press.

———, ed. 1997. *Eco-city dimensions: Healthy communities, healthy planet.* Gabriola Island, BC: New Society Publishers.

———. 1994. Ecological Planning for Sustainable Communities. In *Futures by design: The practice of ecological planning.*, ed. Doug Aberley, 70-78. Gabriola Island, BC: New Society Publishers.

Rothwell, Neil, and Martin Turcotte. 2006. The influence of education on civic engagement differences across Canada's rural-urban spectrum. *Rural and Small Town Canada Analysis Bulletin* 7, (1). Ottawa, Ontario: Statistics Canada.

Rowles, Graham D. 1980. Toward a geography of growing old. In *The human experience of space and place.*, eds. Anne Buttimer, David Seamon, 55-72. New York, New York: St. Martin's Press.

Rubinstein, Robert L., and Patricia A. Parmelee. 1992. Attachment to place and the representation of the life course of the elderly. In *Place attachment.*, eds. Irwin Altman, Setha M. Low, 139-163. New York, New York: Plenum Publishers.

Schratz, Michael, and Ulrike Steiner-Löffler. 1998. Pupils using photographs in school self-evaluation. In *Image-based research.*, ed. Jon Prosser, 235-251. London, U.K.: Falmer.

Schuller, Tom. 2001. The complementary roles of human and social capital. In *The contribution of human and social capital to sustained economic growth* *and well-being.*, eds. John F. Helliwell, Aneta Bonikowska, 89-106. Ottawa, Ontario: OECD and Human Resources Development Canada.

Schuller, Tom, Stephen Baron, and John Field. 2000. Social capital: A review and critique. In *Social capital: Critical perspectives.*, eds. Stephen Baron, John Field and Tom Schuller, 1-38. Oxford, U.K.: Oxford University Press.

Schwartz, Dona. 1992. *Waucoma twilight: Generations of the farm.* Washington: Smithsonian Institution Press.

———. 1989. Visual ethnography: Using photography in qualitative research. *Qualitative Sociology* 12, (2): 119-54.

Science Council of Canada. 1977. *Canada as a conserver society.* Ottawa, Ontario: Science Council of Canada.

Scott, John, and Gordon Marshall, eds. 2005. *Oxford dictionary of sociology.* Third Edition ed. Oxford, U.K.: Oxford University Press.

Scott, Kathryn, Julie Park, and Chris Cocklin. 2000. From 'sustainable rural communities' to 'social sustainability': Giving voice to diversity in Mangakahia Valley, New Zealand. *Journal of Rural Studies* 16: 433-46.

Seale, Clive. 2004. Quality in qualitative research. In *Qualitative research practices.*, eds. Clive Seale, Giampietro Gobo, Jaber F. Gubrium, and David Silverman, 409-419. London, UK: Sage.

Sim, R. Alex. 1988. *Land and community: crisis in Canada's countryside.* Guelph, Ontario: University of Guelph.

Skinner, Mark W., and Alun E. Joseph. 2007. The evolving role of voluntarism in ageing rural communities. *New Zealand Geographer* 63: 119-29.

Skolimowski, Henryk. 1995. In defence of sustainable development. *Environmental Values* 4: 69-70.

Smailes, Peter J. 1995. The enigma of social sustainability in rural Australia. *Australian Geographer* 26, (2): 140-50.

Smithers, John, Paul Johnson, and Alun Joseph. 2004. The dynamics of family farming in North Huron County, Ontario. part II. farm-community interactions. *The Canadian Geographer* 48, (2): 209-24.

Smithers, John, Alun E. Joseph, and Matthew Armstrong. 2005. Across the divide (?): Reconciling farm and town views of agriculture-community linkages. *Journal of Rural Studies* 21: 281-95.

Sorensen, Marianne. 2002. *Rural priorities: Survey of rural Albertans*. Rural Team Alberta, Government of Canada.

Stake, Robert E. 1994. Case studies. In *Handbook of qualitative research.*, eds. Norman K. Denzin and Yvona S. Lincoln. Thousand Oaks, California: Sage Publications.

Statistics Canada. 2006 community profiles, Viking and Beaver County. 2008. [cited 03/27 2008]. Available from http://www12.statcan.ca/english/census06/data/profiles/community.

Statistics Canada, Census of Agriculture. Section 1 - A statistical portrait of agriculture, Canada and provinces: Census years 1921 to 2006. 2007a [cited January 10 2008]. Available from http://www.statcan.ca/english/freepub/95-632-XIE/2007000/histmenu-en.htm#iv.

———. The financial picture of farms in Canada. 2007b [cited January 10 2008]. Available from http://www.statcan.ca/english/agcensus2006/articles/finpic.htm.

———. Characteristics of farm operators. 2007c [cited 04/08 2008]. Available from http://www.statcan.ca/english/freepub/95-629-XIE/2007000/characteristics.htm.

———. Total income of Farm Families. The Daily. 2005, December 8 [cited July 10, 2008]. Available from http://www.statcan.ca/Daily/English/051208/d051208e.htm.

Stein, Jess, and Laurence Urdang, eds. 1966. *The random house dictionary of the English language*. The Unabridged Edition ed. New York: Random House.

Stewart, William P., Derek Liebert, and Kevin W. Larkin. 2004. Community identities as visions for landscape change. *Landscape and Urban Planning* 69: 315-34.

Stirling, Bob. 2001. Work, knowledge, and the direction of farm life. In *Writing off the rural west: Globalization, governments, and the transformation of rural communities.*, eds. Roger Epp, Dave Whitson, 247-261. Edmonton, Alberta: The University of Alberta Press and the Parkland Institute.

Stofferahn, Curtis W., Cordell A. Fontaine, Douglas J. McDonald, Mike Spletto, and Holly Jeanotte. 1991. Growth fundamentalism in dying rural towns: implications for rural development practitioners. *Agriculture and Human Values* 8, (3) (Summer): 25-34.

Stolle, Dietlind, and Thomas R. Rochon. 1998. Are all associations alike? *The American Behavioral Scientist* 42, (1): 47-65.

Sumner, Jennifer. 2005. *Sustainability and the civil commons: Rural communities in the age of globalization*. Toronto, Ontario: University of Toronto Press.

———. 2001. Challenges to sustainability: The impacts of corporate globalization on rural communities. Paper presented at Canadian Society of Extension 2001 Conference.

Suncor Energy. no date. About Suncor. Sustainability. [accessed June 10, 2008]. Available from http://www.suncor.com/default.aspx?ID=1244

_____. no date. Our Business. Oil Sands. Voyageur South. [accessed June 10, 2008]. Available from http://www.suncor.com/default.aspx?ID=2932

Swanson, Larry Douglas. 1980. A study in socioeconomic development: Changing farm structure and rural community decline in the context of technological transformation of American agriculture. PhD., University of Nebraska Lincoln.

Swanson, Merwin. 1977. The "country life movement" and the American churches. *Church History* 46, (3): 358-73.

Troughton, Micheal J. 1990. Decline to development: Towards a framework for sustainable rural development. In *Entrepreneurial and sustainable rural communities.*, ed. Floyd W. Dykeman, 193-200. Sackville, New Brunswick: RUral and Small Town Research and Studies Program.

Tuan, Yi-Fu. 1975. Place: An experiential perspective. *Geographical Review* 65, (2): 151-65.

———. 1974. *Topophilia: A study of environmental perception, attitudes, and values.* Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Turcotte, Martin. 2005. *Social engagement and civic participation: Are rural and small town populations really at an advantage?* Ottawa, Ontario: Statistics Canada, 21-006-XIE, Vol.6, No. 4.

van der Does, Patricia, Sonja Edelaar, Imke Gooskens, Margreet Liefting, and Marije van Mierlo. 1992. Reading images: A study of a Dutch neighbourhood. *Visual Sociology* 7, (1): 4-67.

Vanclay, Frank, and Geoffrey Lawrence. 1995. *The environmental imperative: Eco-social concerns for Australian agriculture*. Rockhampton, Queensland: Central Queensland University Press.

Viterra. Corporate Profile. 2008 [accessed 06/12 2008]. Available from http://www.viterra.ca/portal/wps/wcm/resources/file/ebc63d0503c083a/VT_ProfileFINAL.pdf.

———. First quarter report, January 31, 2008. 2008 [accessed 05/12 2008]. Available from http://www.viterra.ca/portal/wps/wcm/resources/file/eb54610a382c113/News%20Release%20MDandA%20FS.pdf.

Weber, Bruce A., and Robert E. Howell, eds. 1982. *Coping with rapid growth in rural communities*. Boulder, Colorado: Westview Press.

Whittaker, Andrea, and Cathy Banwell. 2002. Positioning policy: The epistemology of social capital and its application in applied rural research in Australia. *Human Organization* 61, (3): 252-61.

Wilkinson, Kenneth P. 1991. *The community in rural America*. New York, New York: Greenwood Press.

Williams, Colin C., and Andrew C. Millington. 2004. The diverse and contested meanings of sustainable development. *The Geographical Journal* 170, (2): 99-104.

Woolcock, Michael. 2001. The place of social capital in understanding social and economic outcomes. In *The contribution of human and social capital to sustained economic growth and well-being.*, eds. John F. Helliwell, Aneta Bonikowska, 64-88. Ottawa, Ontario: OECD and Human Resources Development Canada.

World Commission on Environment and Development (WCED). 1987. *Our common future*. Oxford, U.K.: Oxford University Press.

Appendix A

Interview Guide

(While the photos are to drive the interview process, the following are data which I wish to be sure to gather in that interview. If these topics do not come up in discussions of the photos, be sure to address them afterwards.)

1. What was you working definition of community sustainability, what does community sustainability mean to you

2. Why were these particular photos taken
3. Were there any photos you would have liked to have taken but were unable to do so

4. Once photo discussion is complete (or during photo discussion, whichever flows more naturally) and interviewer has good sense of what participant considers sustainable, ask what makes respondent consider these things sustainable – what or who influences their thinking about this topic
    Do you discuss sustainability (or a particular aspect thereof) with family, friends,
    neighbours?
    Do you read about it?
    Do you feel you have a role in achieving your vision? What/how?

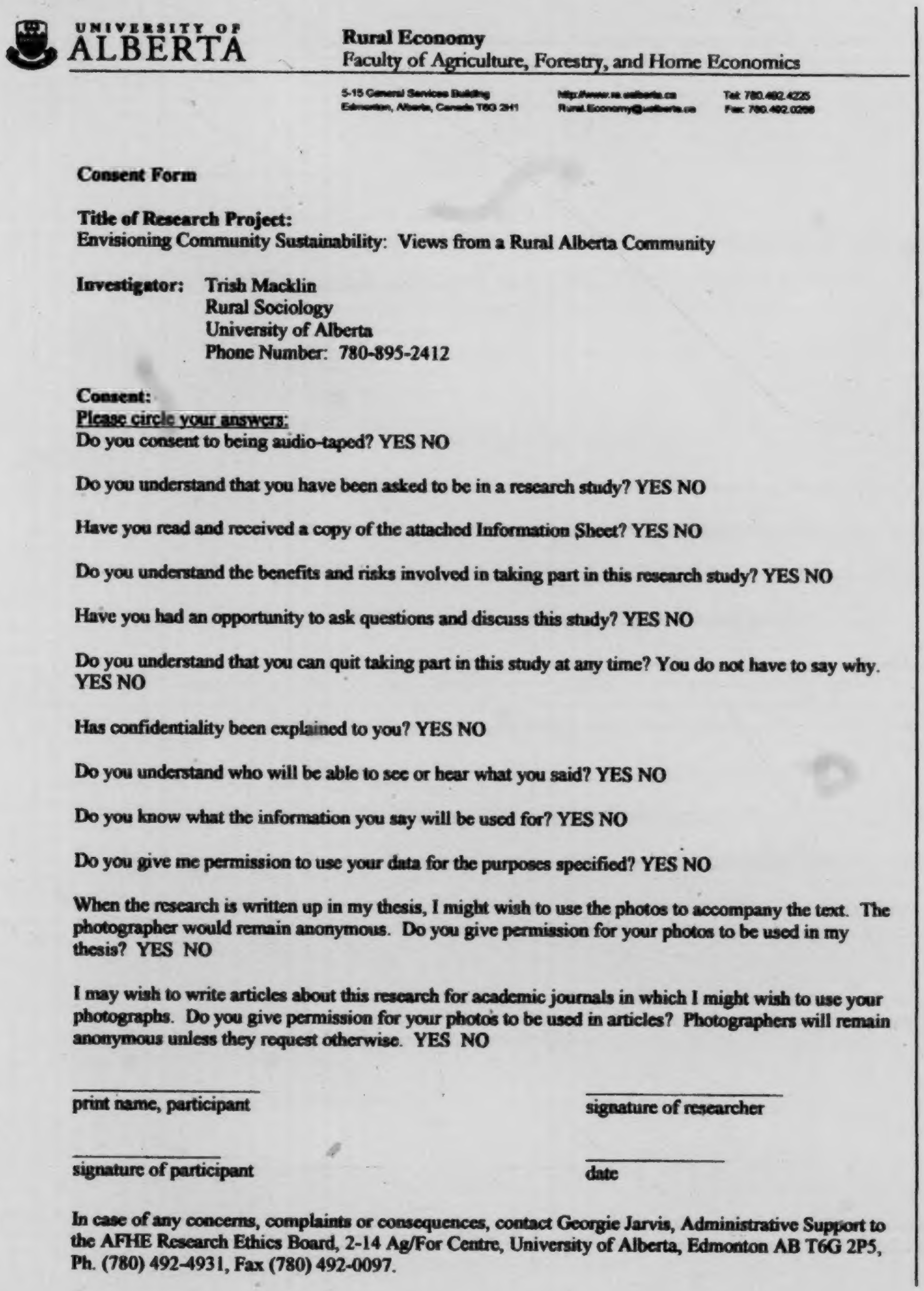
5. Length of time living in the community
6. Why did you choose to live here? *For teen participants*, Would you choose to live here as an adult?
    Why do you stay? What makes this a good place to live? *Don't ask this question with teens. Rather,* What do you like about living here?
    Additional to physical or employment characteristics of the community, explore the 'human' dimension – good neighbours? local friends? local family?

7. roles in the community (business person, farmer, councilor, teacher, volunteer, etc)
8. employment (working at what paid job, if any; working at what unpaid jobs – child/elder care, volunteer, etc)
9. Participation in clubs, groups, churches, organized sports
Do any of these organizations address any of the aspects of sustainability discussed in terms of education or action?

10. Code gender of participant and location (living in town, out of town)

Appendix B

Consent forms, Information sheet, and Ethics Board Approval



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Tel: 780.492.4225
Fax: 780.492.0268

Consent Form

Title of Research Project:
Envisioning Community Sustainability: Views from a Rural Alberta Community

Investigator: Trish Macklin
Rural Sociology
University of Alberta
Phone Number: 780-895-2412

Consent:
Please circle your answers:
Do you consent to being audio-taped? YES NO

Do you understand that you have been asked to be in a research study? YES NO

Have you read and received a copy of the attached Information Sheet? YES NO

Do you understand the benefits and risks involved in taking part in this research study? YES NO

Have you had an opportunity to ask questions and discuss this study? YES NO

Do you understand that you can quit taking part in this study at any time? You do not have to say why. YES NO

Has confidentiality been explained to you? YES NO

Do you understand who will be able to see or hear what you said? YES NO

Do you know what the information you say will be used for? YES NO

Do you give me permission to use your data for the purposes specified? YES NO

When the research is written up in my thesis, I might wish to use the photos to accompany the text. The photographer would remain anonymous. Do you give permission for your photos to be used in my thesis? YES NO

I may wish to write articles about this research for academic journals in which I might wish to use your photographs. Do you give permission for your photos to be used in articles? Photographers will remain anonymous unless they request otherwise. YES NO

____
print name, participant

____
signature of researcher

____
signature of participant

____
date

In case of any concerns, complaints or consequences, contact Georgie Jarvis, Administrative Support to the AFHE Research Ethics Board, 2-14 Ag/For Centre, University of Alberta, Edmonton AB T6G 2P5, Ph. (780) 492-4931, Fax (780) 492-0097.

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Parental Consent Form for Youth's Participation in Research Project

Title of Research Project:
Envisioning Community Sustainability: Views from a Rural Alberta Community
Investigator: Trish Macklin
Rural Sociology
University of Alberta
Phone Number: 780-895-2412

Consent:
Please circle your answers:
Do you consent to the interview with your teen being audio-taped? YES NO

Do you understand that your teen has been asked to be in a research study? YES NO

Have you read and received a copy of the attached Information Sheet? YES NO

Do you understand the benefits and risks involved in taking part in this research study? YES NO

Have you and your teen had an opportunity to ask questions and discuss this study? YES NO

Do you understand that you can request your teen not take part in this study at any time? You do not have to say why. YES NO

Has confidentiality been explained to you? YES NO

Do you understand who will be able to see or hear what your teen said? YES NO

Do you know what the information your teen provides will be used for? YES NO

Do you give me permission to use your teen's data for the purposes specified? YES NO

When the research is written up in my thesis, I might wish to use the photos to accompany the text. The photographer would remain anonymous. Do you give permission for your teen's photos to be used in my thesis? YES NO

I may wish to write articles about this research for academic journals in which I might wish to use your photographs. Do you give permission for your teen's photos to be used in articles? Photographers will remain anonymous unless they request otherwise. YES NO

print name (parent/guardian) relationship to participant signature of parent/guardian

print name of participant signature of participant

signature of researcher date

In case of any concerns, complaints or consequences, contact Georgie Jarvis, Administrative Support to the AFHE Research Ethics Board, 2-14 Ag/For Centre, University of Alberta, Edmonton AB T6G 2P5, Ph. (780) 492-4931, Fax (780) 492-0097.

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Information Sheet
Project Title: Envisioning Community Sustainability: Views from a Rural Alberta Community

Purpose:
This research project hopes to find out how community members would visualise sustainability in their community and what social influences are behind ideas of sustainability.

Methods:
You are being asked to take photos of sustainable and unsustainable things in your community. Afterward you will to talk to the researcher about your photos and what you would like your community to be like in the future. The researcher will ask you questions about your photos and you can answer in your own words. The researcher will also ask questions about your involvement in the community, whether formal (belonging to a club, for example) or informal (looking after the neighbour's kids, for example). There are no right or wrong answers. This interview will last for about 1 hour.

Confidentiality:
The interview will be recorded on tape. The tape will be typed out by a transcriber who will sign a confidentiality statement. The name of the person in the interview will not be recorded on the tape or the paper. Instead a number will be given to that interview. This number, or a fake name, will be used on anything that gets written about the interview. Only the researcher will know the name of the person on the tape. All of the information that has the person's name on it will be locked up. Interviews will be done anywhere you feel comfortable.

Benefits:
This study may not have any direct benefits for you. But, it is hoped that by understanding how people see sustainability in their communities, future community projects or planning could be done in a way that is more reflective of what citizens want.

Risks:
It is not expected that being in this study will harm you.

Withdrawal from the Study:
Even after you have agreed to do the interview you may decide that you no longer wish to do the interview. This decision can be before, or during the interview. You may also decide after the interview that you do not want what you said to be used. The researchers then cannot use what you said or the photographs you have taken.

Use of your Information:
This study is being done for a Master's thesis. The researcher is a student at the University. What everyone says will be made into a report. If you want, a short version of this report will be mailed to you. The researcher may write articles for academic journals using the results of the research. None of the reports or articles that get written will have your name, or any way of identifying you, in them.

If you have any concerns or complaints about the project at any time and you do not wish to raise them with the researcher, you may contact Georgie Jarvis, Administrative Support to the AFHE Research Ethics Board, 2-14 Ag/For Centre, University of Alberta, Edmonton AB T6G 2P5, Ph. (780) 492-4931, Fax (780) 492-0097.

Faculty of Agriculture, Forestry, and Home Economics
Human Research Ethics Board
Approval

is hereby granted to:

Debra Davidson, Principal Investigator for

07-03 Envisioning Community Stability: Views From a Rural Alberta Community

for a term of one year, provided there is no change in experimental procedures. Any changes in experimental procedures must be submitted in writing to the HREB.

Granted: March 23rd, 2007

for *Lori Harach, Chair, AFHE REB*